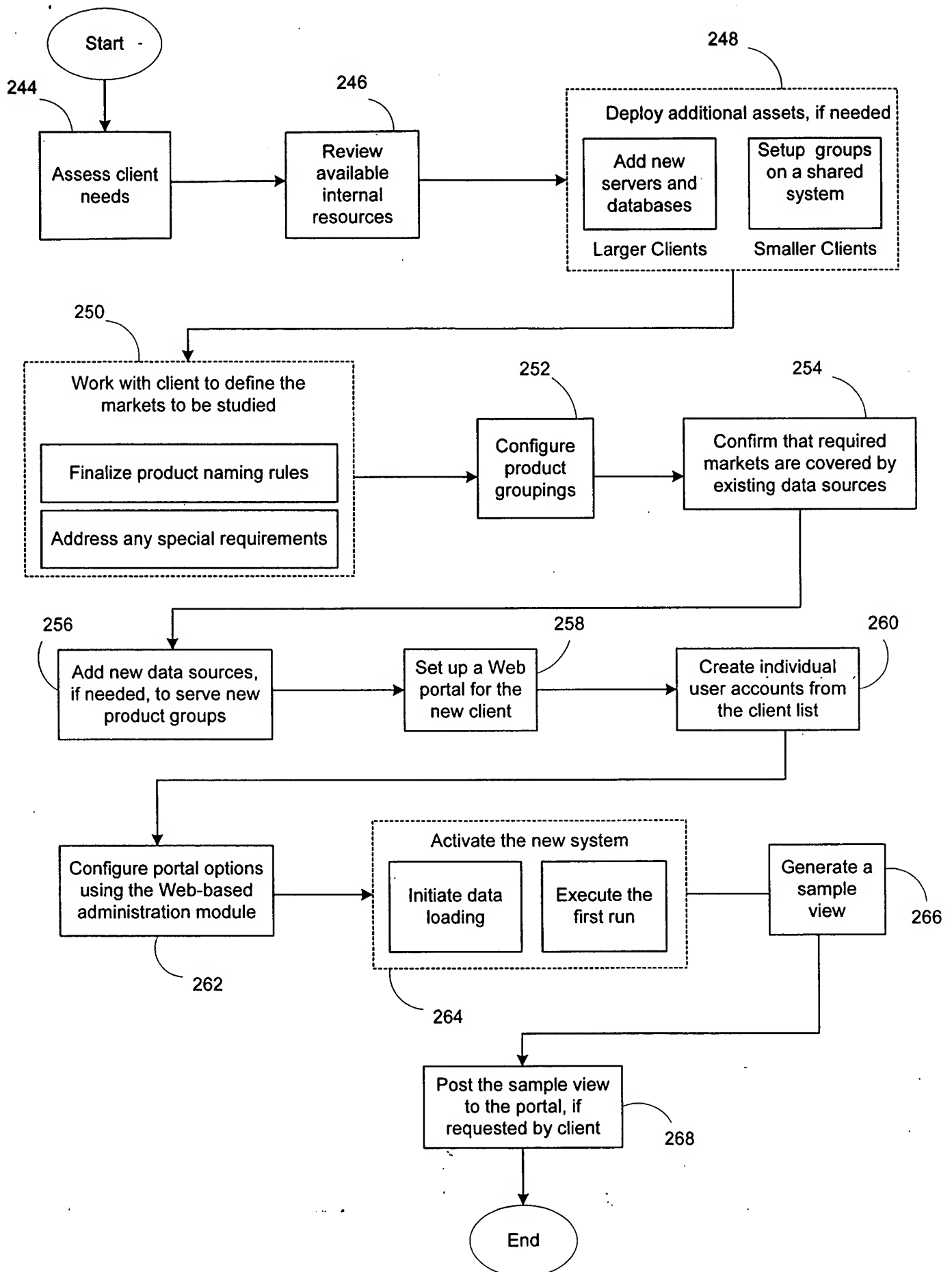
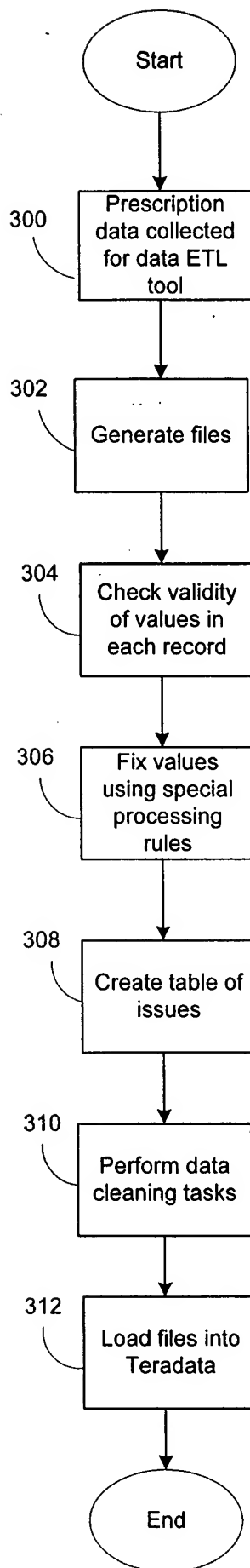


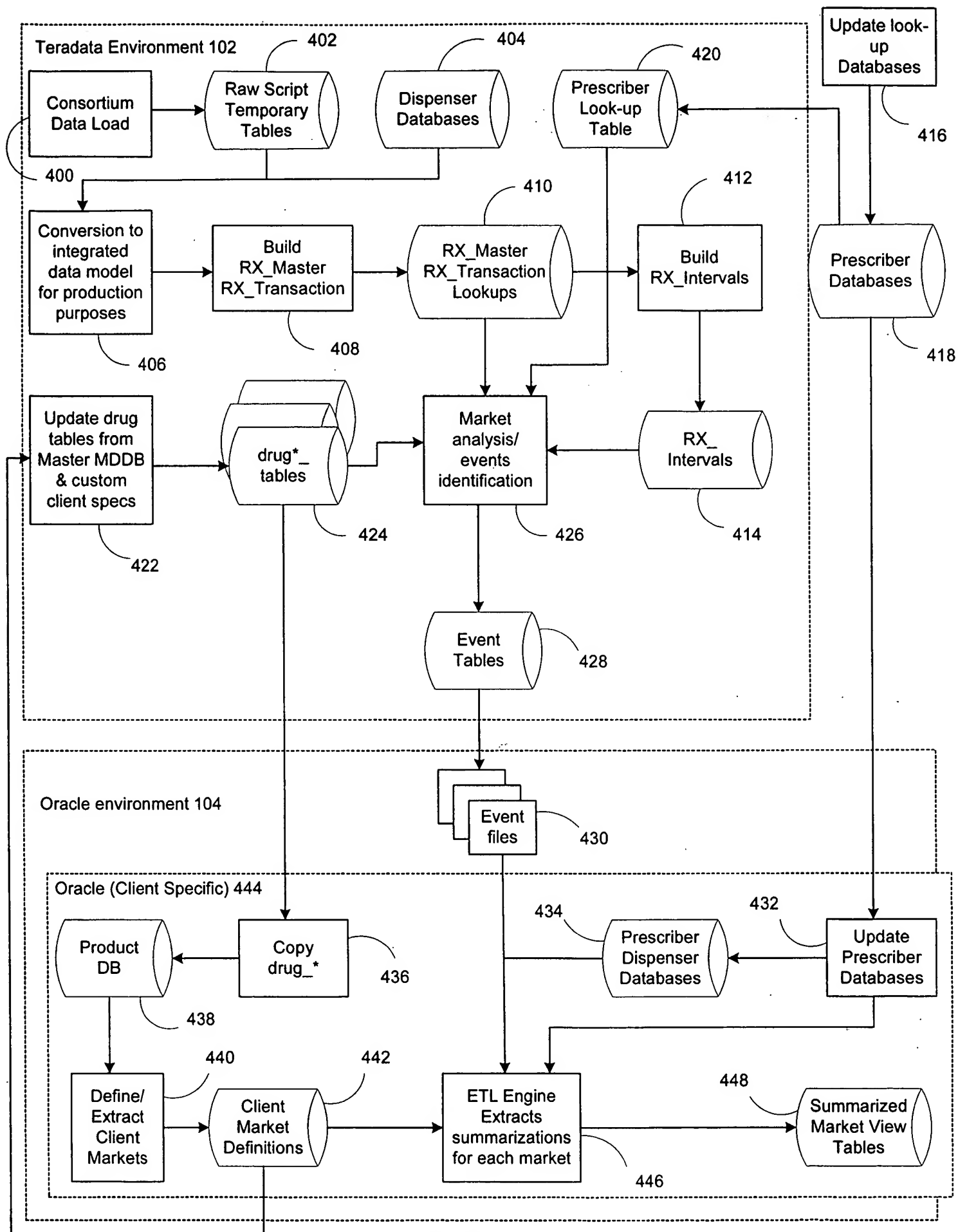
**FIG. 2**

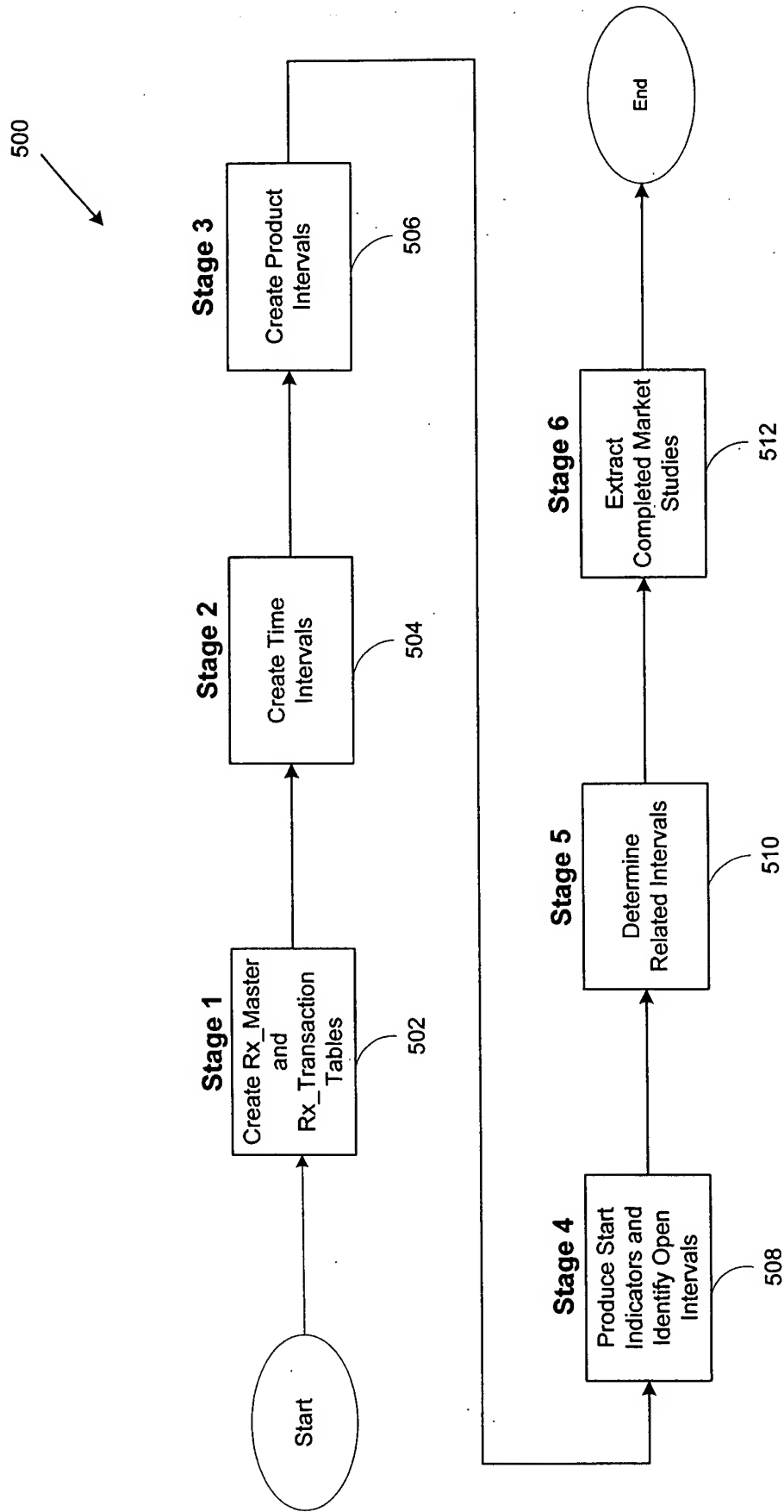


**FIG. 2a**



**FIG. 3**





**FIG. 5**

| RX_Master      |
|----------------|
| rx_id          |
| patient_id     |
| dispenser_id   |
| prescriber_id  |
| dispensed_NDC9 |

514

| RX_Transaction        |
|-----------------------|
| rx_id                 |
| transaction_id        |
| Dispensed_NDC_Pack    |
| age_Code              |
| refill_nbr            |
| dispensed_date        |
| dispensed_quantity    |
| days_supply_dispensed |
| Payment_Type          |
| DAW_Code              |

516

| G_Atomic_Intervals |
|--------------------|
| rx_id              |
| group_code         |
| dispensed_date     |
| end_date           |
| day_qty            |
| refill_nbr         |
| start_order        |

518

| RX_Intervals     |
|------------------|
| rx_id            |
| start_date       |
| end_date         |
| last_refill_date |
| qty              |
| start_refill_nbr |
| refill_count     |

520

| Product_Intervals |
|-------------------|
| patient_id        |
| interval_id       |
| prescriber_id     |
| product_id        |
| category_id       |
| area_id           |
| start_date        |
| end_date          |
| last_refill_date  |

522

| Tmpg_MergedIntervals |
|----------------------|
| patient_id           |
| prescriber_id        |
| ncdpd_nbr            |
| product_id           |
| category_id          |
| area_id              |
| start_date           |
| end_date             |
| last_refill_date     |
| start_refill_nbr     |
| start_indicator      |
| interval_id          |
| group_code           |

524

| TEMP_Event_Intervals |
|----------------------|
| patient_id           |
| prescriber_id        |
| product_id           |
| category_id          |
| area_id              |
| start_date           |
| end_date             |
| last_refill_date     |
| start_indicator      |
| interval_id          |
| flg_opened_interval  |

526

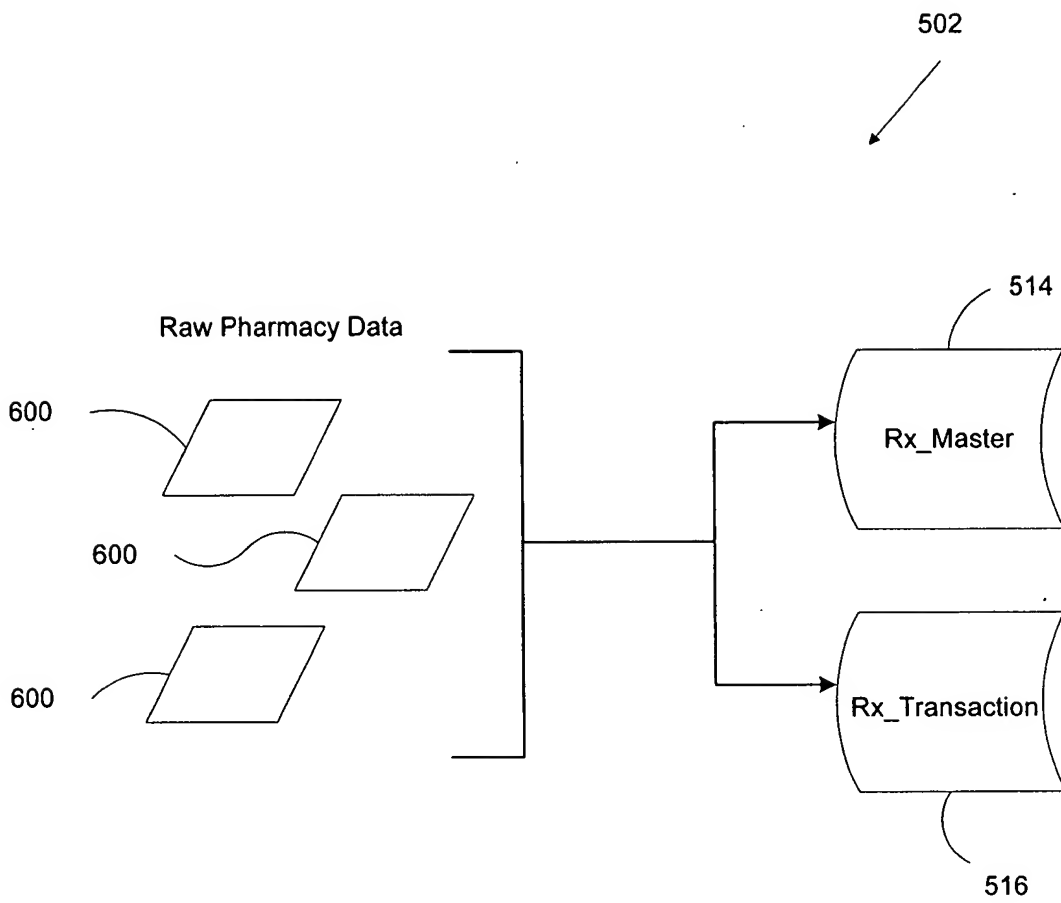
| Related_Intervals   |
|---------------------|
| patient_id          |
| interval_id         |
| related_interval_id |
| relation_type       |

528

| Event_Intervals     |
|---------------------|
| patient_id          |
| prescriber_id       |
| product_id          |
| category_id         |
| area_id             |
| start_date          |
| end_date            |
| last_refill_date    |
| start_indicator     |
| interval_id         |
| flg_opened_interval |

530

FIG. 5a



**FIG. 6**



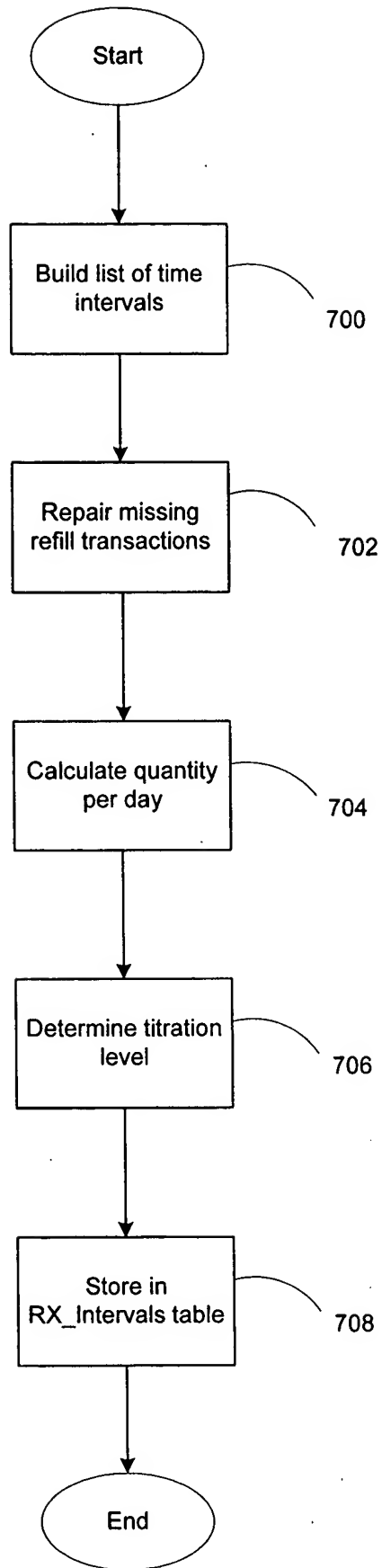
| RX-MASTER             |           |             |   |
|-----------------------|-----------|-------------|---|
| Column Name           | Data Type | Null Option | Description   |
| <i>rx_id</i>          |           |             | Primary key. Keys this table to <b>RX_Transaction</b> .   |
| <i>patient_id</i>     |           |             | A unique identifier for the current anonymous patient. Details about the patient, including birth year and gender, are stored separately in a <b>Patient</b> table. The <b>Patient</b> table is keyed to this <i>patient_id</i> as is the Patient Identifier used by the Dispenser for this patient   |
| <i>dispenser_id</i>   |           |             | A unique identifier which indicates the pharmacy that dispensed the product to the patient. <i>Dispenser_id</i> is used to link to the dispenser table and contains details about the dispenser/pharmacy including address, chain affiliations, store affiliations and NCPDP number. Currently, the <i>dispenser_id</i> is the pharmacy's NCPDP number but this may be changed at some point because not all data providers apply NCPDP numbers   |
| <i>prescriber_id</i>  |           |             | Identifies the prescribing physician. This is a sequentially generated identifier. The <b>xREF_DEA</b> table provides a look-up between the <i>prescriber_id</i> and the DEA number. In the future, another "xREF" table will provide a direct map between the <i>prescriber_id</i> and the Dendrite UMP databases.   |
| <i>dispensed_NDC9</i> |           |             | Identifies the product dispensed. The number is the first 9 digits of an 11-digit format National Drug Code (NDC code). The first 5 digits of this number identifies the manufacturer. The next 4 digits provide the manufacturer's product number.<br>Dispensed_NDC9 is stored as an integer, thus the leading 0's are implicit. Since the last 2 digits of an 11-digit NDC number just specify a given product's package code, we can safely assume that all prescriptions with the same first 9 digits are, in fact, the same product. Note: any product with an NDC code which doesn't follow the NDC11 to NDC9 roll-up cannot be analyzed using ScripMaxIQ. This includes medical devices. |

Figure 6a

| RX-TRANSACTION                    |  |             |   |
|-----------------------------------|--|-------------|---|
| Column Name                       | Data Type  | Null Option | Description   |
| <i>rx_id</i>                      | Integer  | Not Null    | Primary key. Keys this table to <b>RX_Master</b> .  |
| <i>transaction_id</i>             | Decimal<br>(11,0)  | Not Null    | Uniquely identifies the current purchase transaction. Since prescription ID's aren't required for consortium data, this ID is derived by combining the four elements which make up <i>rx_id</i> as well as <i>refill_no</i> and <i>dispensed_date</i> .   |
| <i>Dispensed_NDC_Package_Code</i> | Smallint   |             | Holds the last 2 digits that had been removed to create Dispensed_NDC9<br>From the current prescriptions 11-digit NDC Code.   |
| <i>REFILL_NBR</i>                 | Smallint   |             | This is the refill sequence number from the original prescription. The first null prescription has a refill number of 0.  |
| <i>dispensed_date</i>             | Date Format<br>yyyy-mm-dd                                  | Not null    | Specifies the date that the current transaction occurred.   |
| <i>dispensed_quantity</i>         | Decimal<br>(10,2)<br>Compress 30                           |             | Indicates the number of dosages (pills, capsules, etc.) that were dispensed   |
| <i>DAYS_SUPPLIED_DISPENSED</i>    | Smallint<br>Compress 30                                    |             | Shows the number of days that this dispensed medication is scheduled to last, i.e. 60 pills @ 2 per day = 30 days. There are values for <i>days_supply_dispensed</i> which don't match the day supply but indicate other things. For example, a value of "98" or "99" indicates that a given product was dispensed on an "as needed" basis. |
| <i>Payment_type</i>               | Varchar (1)<br>Character set<br>latin not case<br>specific |             | Specifies the form of payment used to purchase this medication, i.e., cash, medical insurance or Medicare   |
| <i>DAW_Code</i>                   | Varchar (2)  | Character   | Shows whether the dispenser provided the exact product specified on the prescription or a substitute  |

**Figure 6b**

504



**FIG. 7**

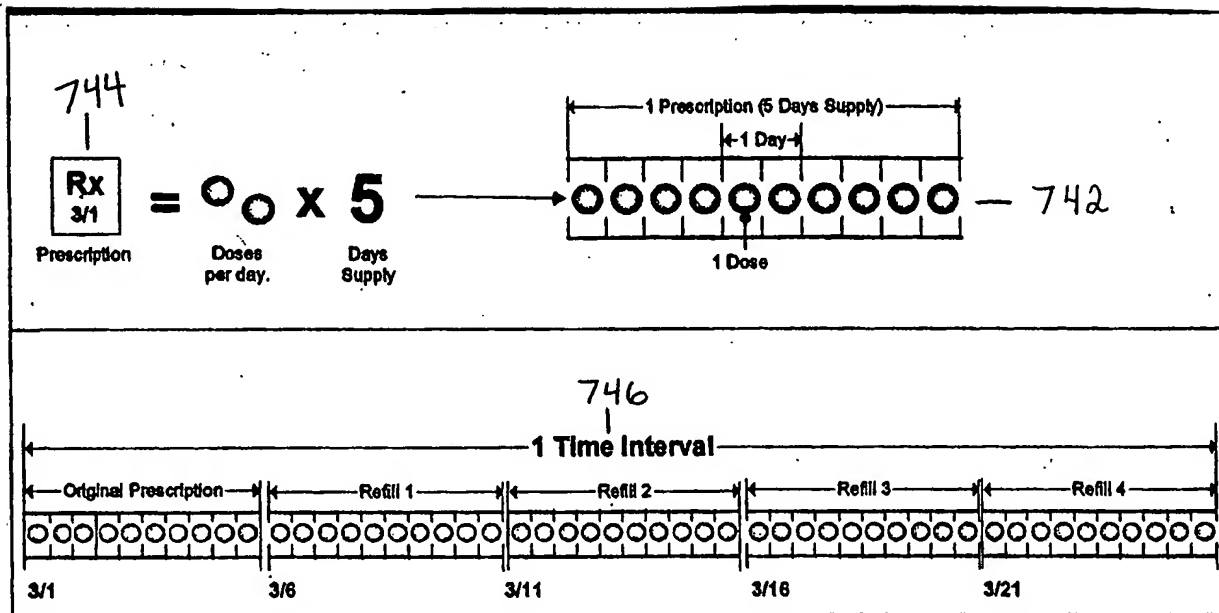
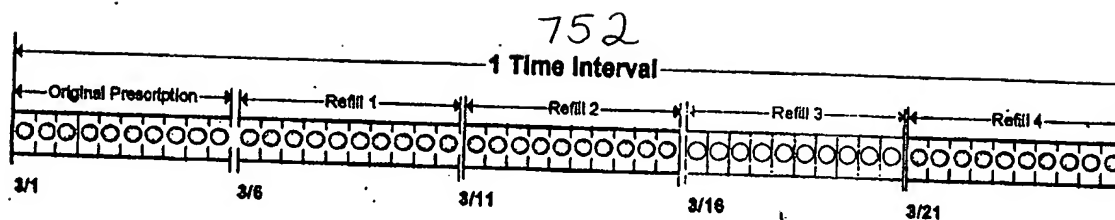


FIG. 7a



750

FIG. 7b

| RX Interval             |           |             |   |
|-------------------------|-----------|-------------|---|
| Column Name             | Data Type | Null Option | Description   |
| <i>rx_id</i>            |           |             | Primary Key.  |
| <i>start_date</i>       |           |             | Indicates the start of the current refill's treatment cycle. Calculated from the Rx purchase date.  |
| <i>end_date</i>         |           |             | Indicates the end of the current refill's treatment cycle. Calculated by adding the <i>days_supply</i> of the medication to its purchase date.  |
| <i>last_refill_date</i> |           |             | <i>last_refill_date</i> is the last date within this interval that the patient physically refilled an Rx for the same product. The actual date the patient stopped taking the product will be sometime between this date and <i>end_date</i> , which is <i>last_refill_date</i> plus <i>days_supply</i> taken from the last refill (which could be different from the <i>days_supply</i> for all previous refills on a prescription). |
| <i>qty</i>              |           |             | Refers to quantity per day of the medication. This is a fractional number.  |
| <i>start_refill_nbr</i> |           |             | Stores the refill number of the earliest transaction in   |

FIG. 7c

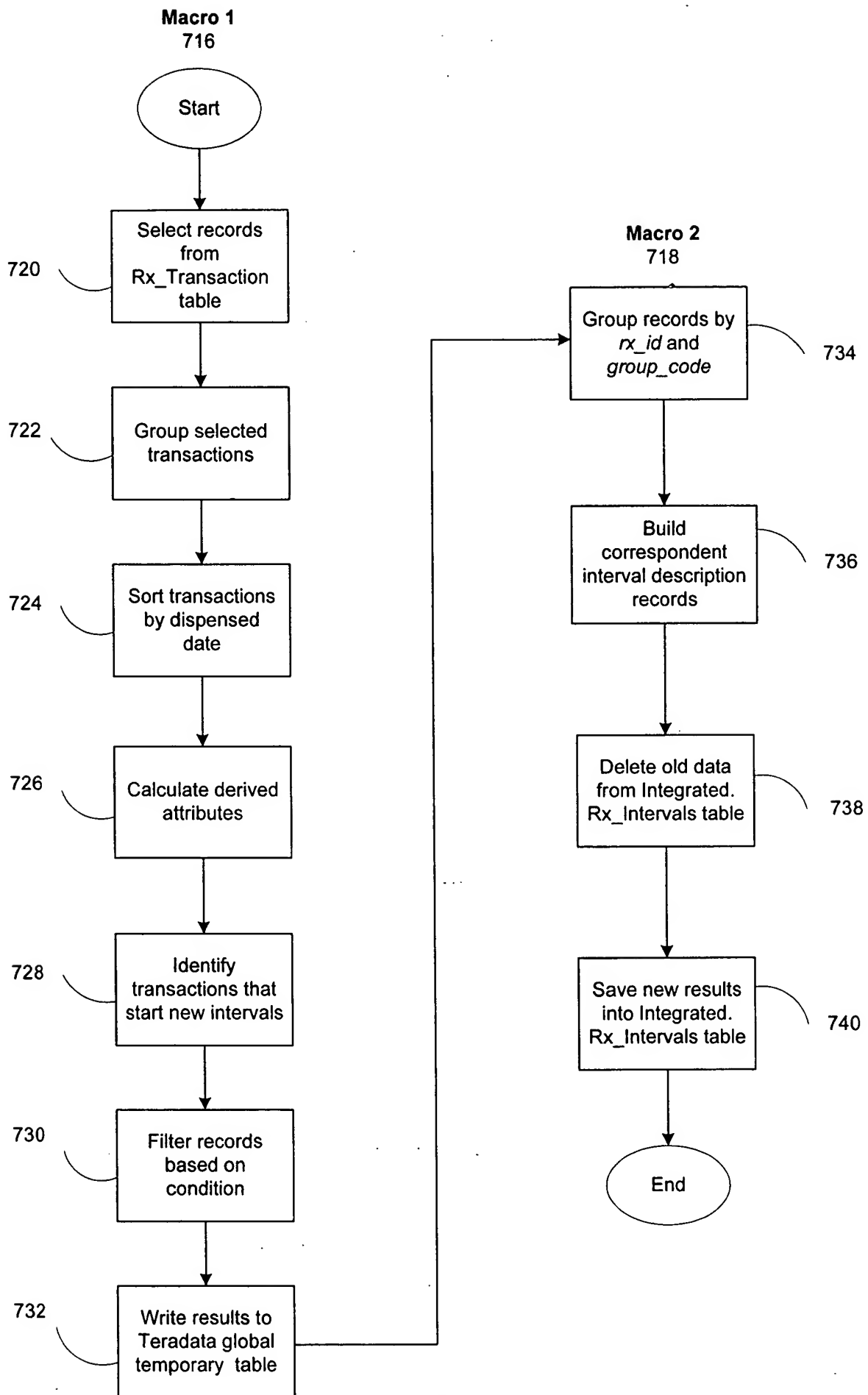
Rx Transaction Table Entries

| Rx_id       | Transaction_Id | Dispensed ndc package code | Refill_no | Dispensed Date | Dispensed QTY | Days Supply | Payment Type | DAW |
|-------------|----------------|----------------------------|-----------|----------------|---------------|-------------|--------------|-----|
| 714         |                |                            |           |                |               |             |              |     |
| 469,814,736 | 1,442,997,754  | 08                         | 2         | 2000-01-28     | 60            | 30          | T            | 0   |
| 469,814,736 | 787,315,098    | 08                         | 3         | 2000-06-01     | 60            | 30          | T            | 0   |
| 469,814,736 | 627,226,368    | 08                         | 4         | 2000-07-03     | 30            | 15          | T            | 0   |
| 469,814,736 | 469,814,736    | 08                         | 0         | 2000-12-11     | 60            | 30          | T            | 0   |
| 469,814,736 | 633,143,033    | 08                         | 1         | 2001-01-30     | 60            | 30          | T            | 0   |

Corresponding RX Interval Records

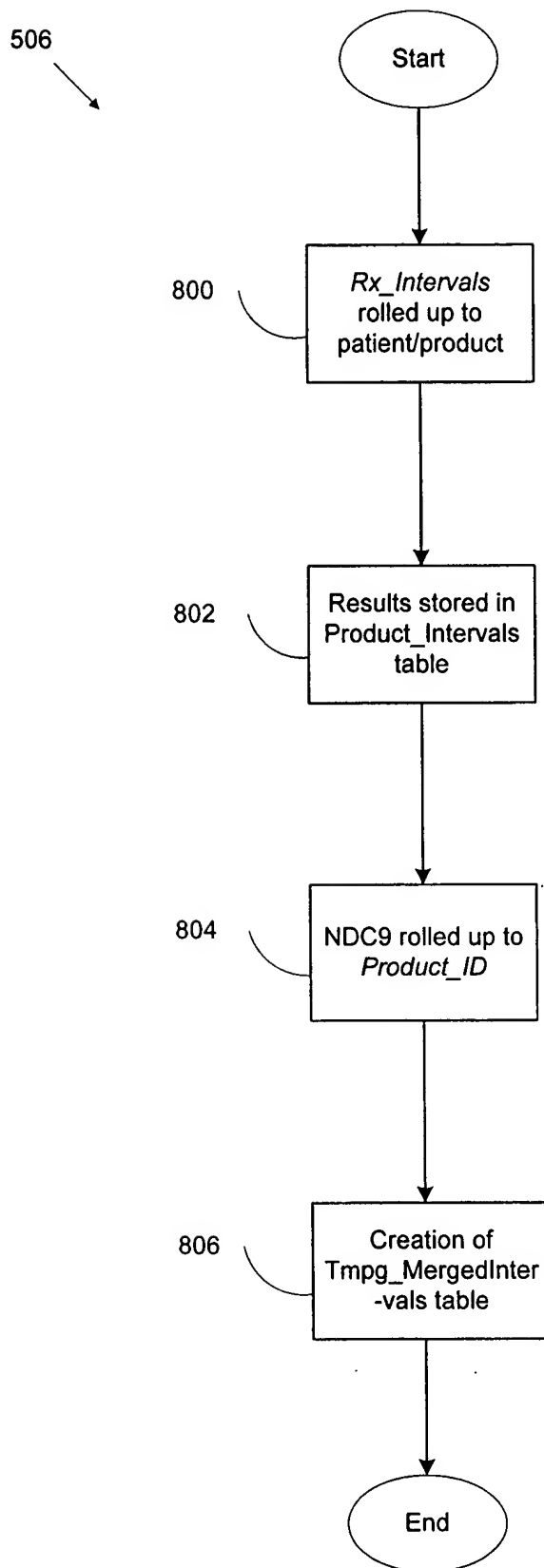
| Rx_id       | Start_date | End_date   | Last_refill_date | Qty  | Refill_count | Start_refill_nbr |
|-------------|------------|------------|------------------|------|--------------|------------------|
| 714         |            |            |                  |      |              |                  |
| 469,814,736 | 2000-01-28 | 2000-07-18 | 2000-07-03       | 2.00 |              |                  |
| 469,814,736 | 2000-12-11 | 2001-02-30 | 2001-01-30       | 2.00 |              |                  |

FIG. 7d



**FIG. 7e**



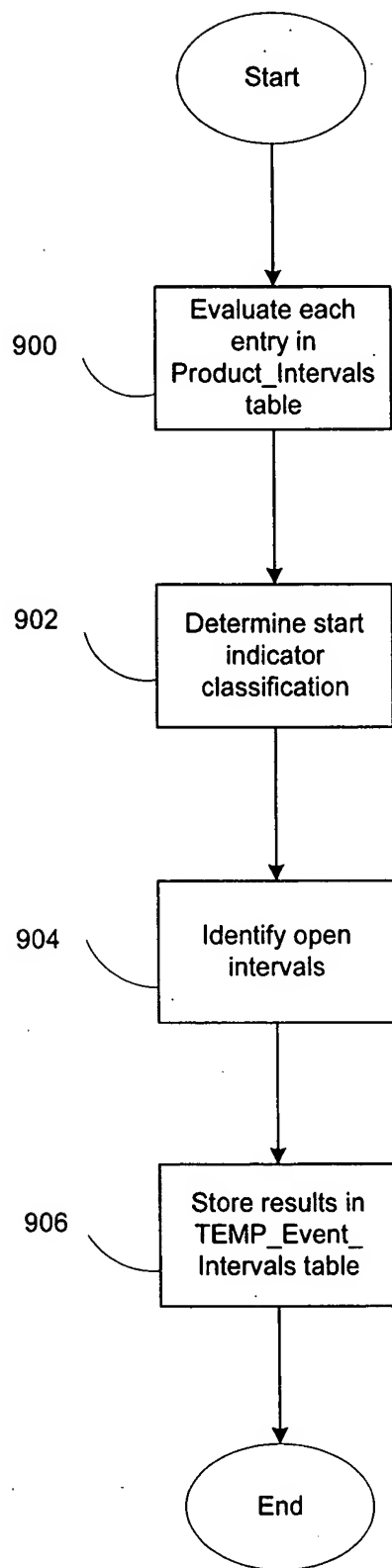


**Fig. 8**

| Product_Intervals    |           |             |  |
|----------------------|-----------|-------------|--|
| Column Name          | Data Type | Null Option | Description  |
| <i>patient_id</i>    |           |             | <i>patient_id</i> and <i>interval_id</i> are combined to create the primary key. <i>interval_id</i> is a small int and restarts for each patient.  |
| <i>interval_id</i>   |           | Small int   |  |
| <i>prescriber_id</i> |           |             | Identifies the prescribing physician. This is a sequentially generated identifier. The xRef_DEA table provides a look-up between the <i>prescriber_id</i> and the DEA number. In the future, another "xRef" table will provide a direct map between the <i>prescriber_id</i> and the Dendrite UMP database.  |
| <i>product_id</i>    |           |             | Corresponds to a combination of a unique product trade name and classification from NDDb. Every unique combination is given a product ID. Product IDs can also be custom-defined. Custom-defined product have negative product IDs.  |
| <i>category_id</i>   |           |             | <i>Category_ID</i> is the Therapeutic Category that this product belongs to. This is a narrow grouping of products. Products within the same Therapeutic Category are considered generally equivalent to one another, in other words they compete amongst each other. The <i>Category_ID</i> corresponds to the <i>class_id</i> part of a product's Generic Product Identifier (GPI) in the MDDB Database. Classes can also be custom-defined. |
| <i>area_id</i>       |           |             | Identifies the Therapeutic Area that this product belongs to. This is a broad grouping of comparable products. That's to say, products between which switch events are possible. If two products are not in the same Therapeutic Area, then they aren't considered switch candidates.  |
| <i>start_date</i>    |           |             | Indicates the start of the current refill's treatment cycle. Calculated from the Rx purchase date.   |
| <i>end_date</i>      |           |             | Indicates the end of the current refill's treatment cycle. Calculated by adding the <i>days_supply</i> of the medication to <i>start_date</i> .  |

FIG. 8a

508

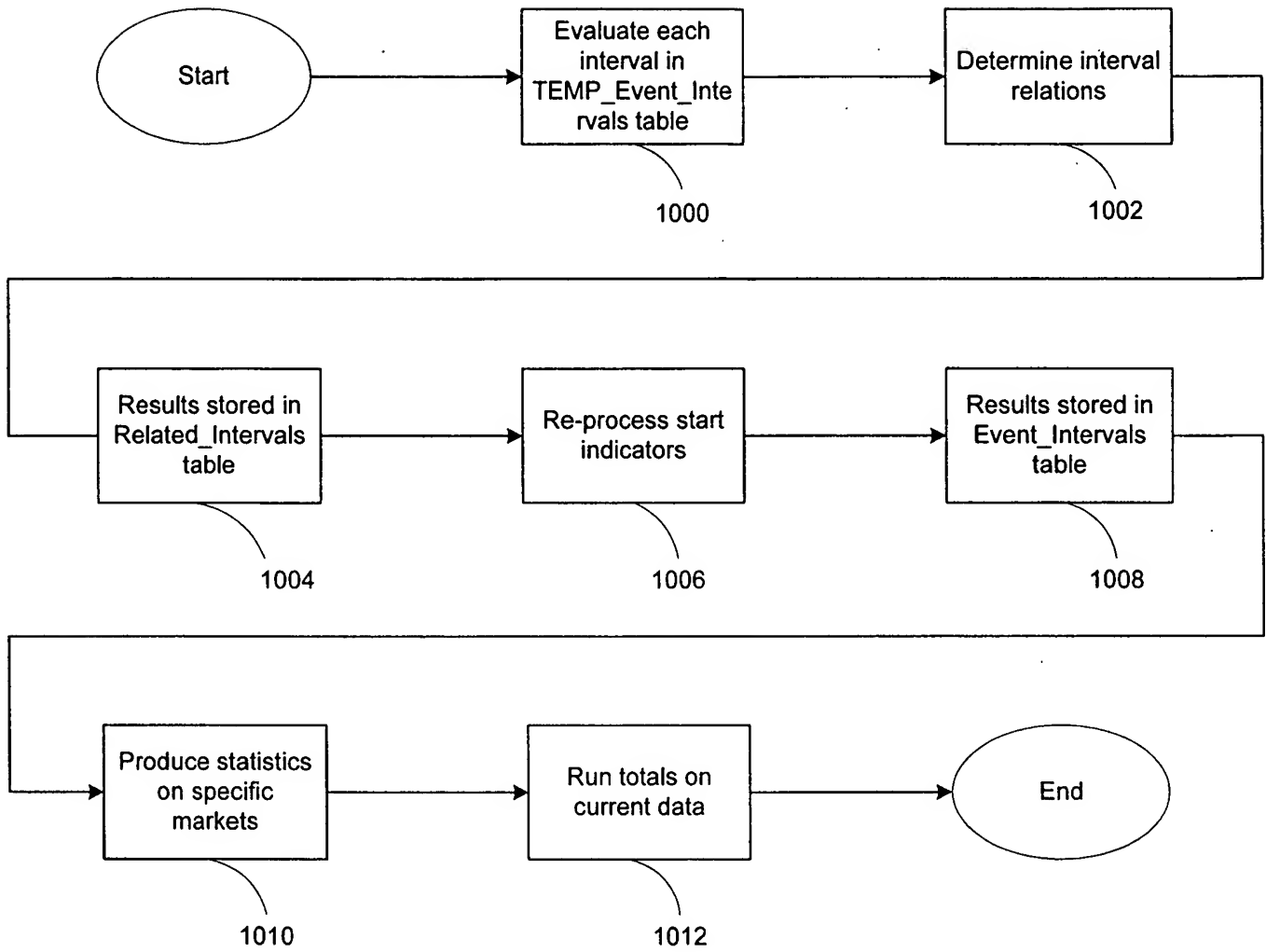


**FIG. 9**

| Value | Name           | Description  |
|-------|----------------|--|
| T     | Area Start     | First time the patient has taken any product in this therapeutic area                            |
| M     | Category Start | First time the patient has taken any product in this therapeutic category                        |
| B     | Product Start  | First time the patient has taken this product  |
| R     | Restart        | The patient is taking this product after not taking this product anytime in the previous 90 days |
| X     | Intermittent   | None of the above conditions met. Indicates intermittent use                                     |

**FIG. 9a**

510



**FIG. 10**

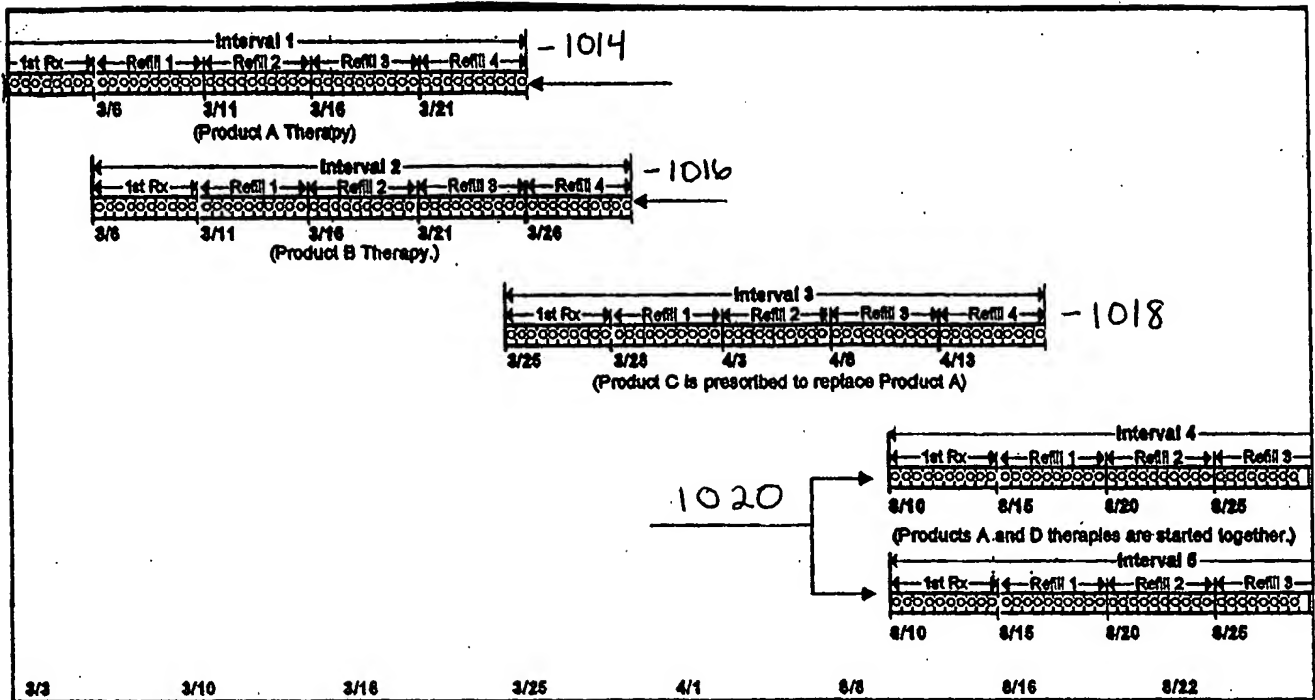
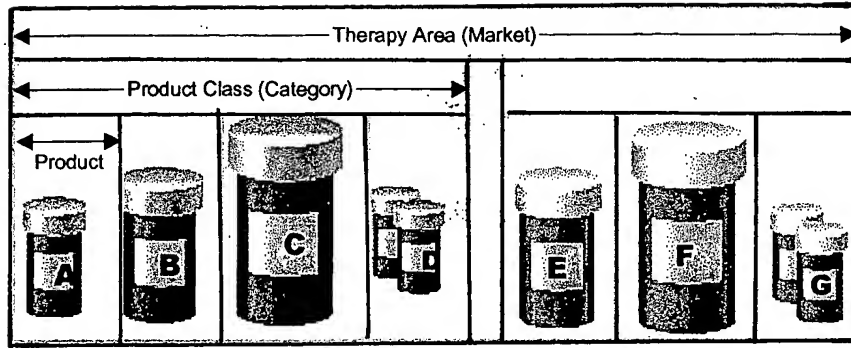


FIG. 10a

1030



1032

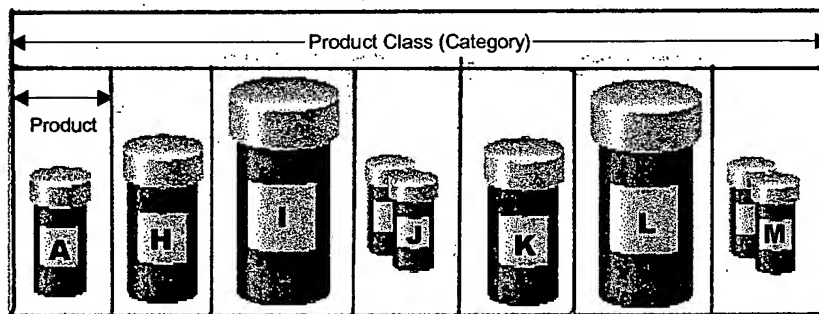
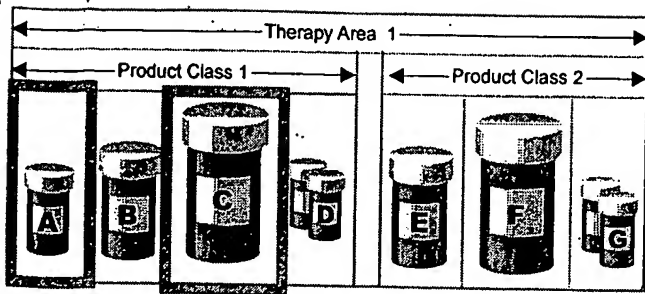
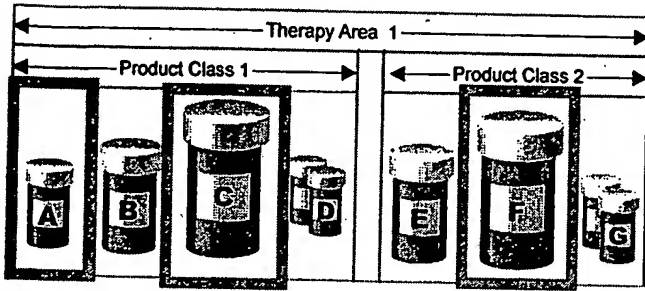


Figure 10b.



|         |         |                        |         |         |
|---------|---------|------------------------|---------|---------|
| Week 21 | Week 22 | Week 23                | Week 24 | Week 25 |
|         |         | Product C (PC 1, TA 1) |         |         |
|         |         | Product A (PC 1, TA 1) |         |         |
|         |         | Product F (PC 2, TA 1) |         |         |

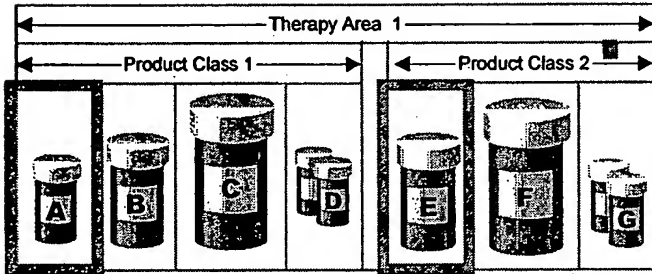
1034



|         |         |                        |         |         |
|---------|---------|------------------------|---------|---------|
| Week 21 | Week 22 | Week 23                | Week 24 | Week 25 |
|         |         | Product C (PC 1, TA 1) |         |         |
|         |         | Product A (PC 1, TA 1) |         |         |

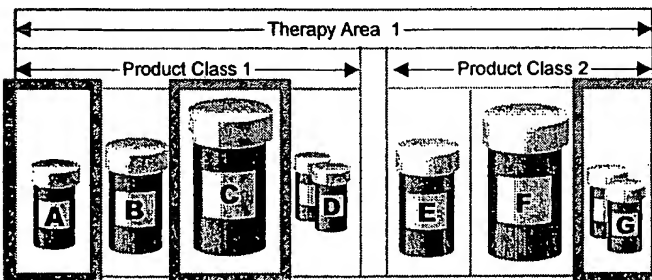
PC = Product Class  
TA = Therapy Area

1036



|         |         |                        |         |         |
|---------|---------|------------------------|---------|---------|
| Week 21 | Week 22 | Week 23                | Week 24 | Week 25 |
|         |         | Product A (PC 1, TA 1) |         |         |
|         |         | Product E (PC 2, TA 1) |         |         |

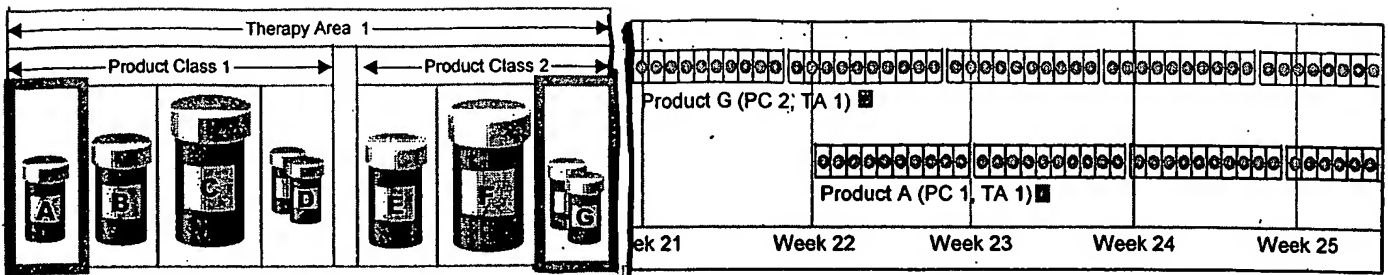
1038



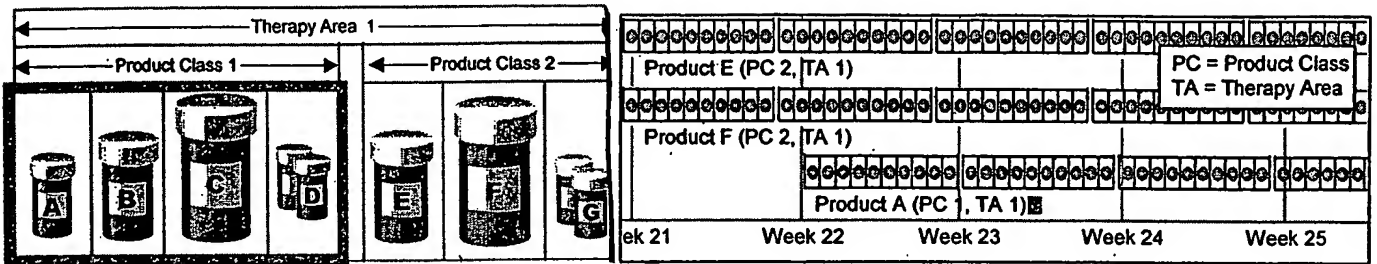
|         |         |                        |         |         |
|---------|---------|------------------------|---------|---------|
| Week 21 | Week 22 | Week 23                | Week 24 | Week 25 |
|         |         | Product G (PC 2, TA 1) |         |         |
|         |         | Product A (PC 1, TA 1) |         |         |
|         |         | Product C (PC 1, TA 1) |         |         |

Figure 10 C

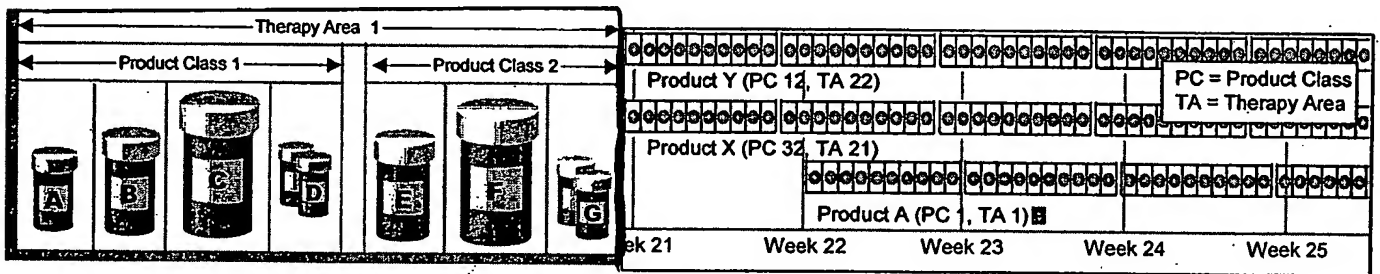




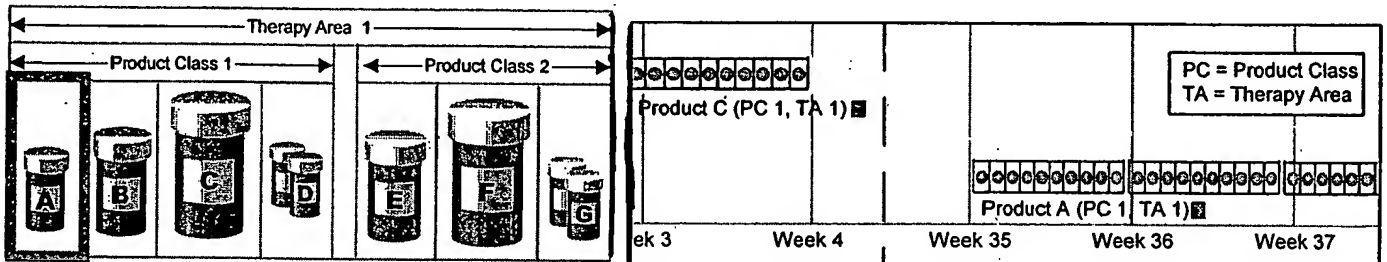
1042



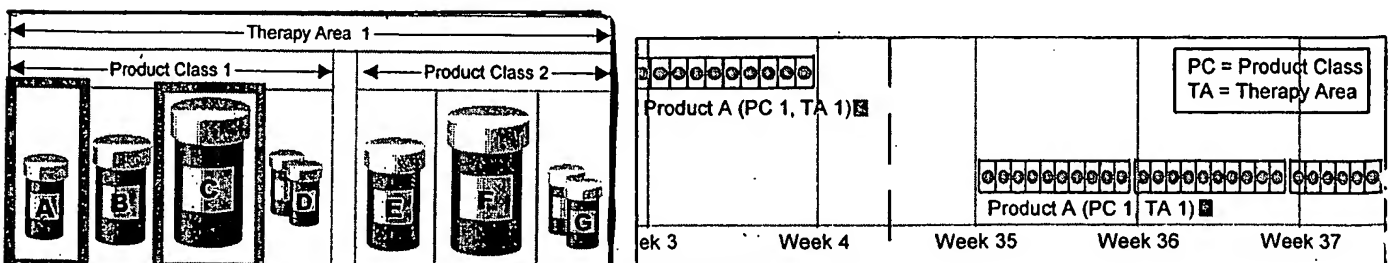
1044



1046



1048



1050

Figure 10d

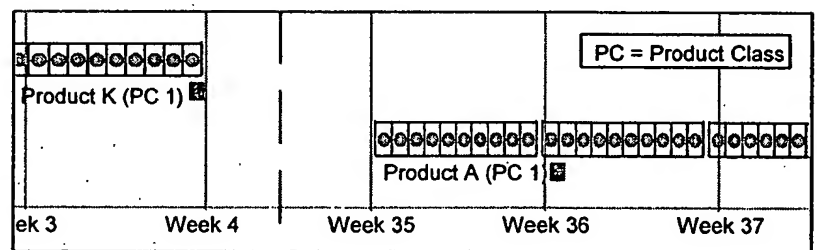
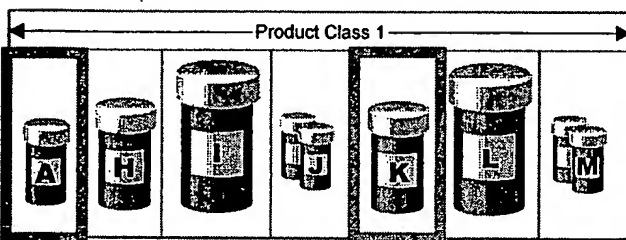
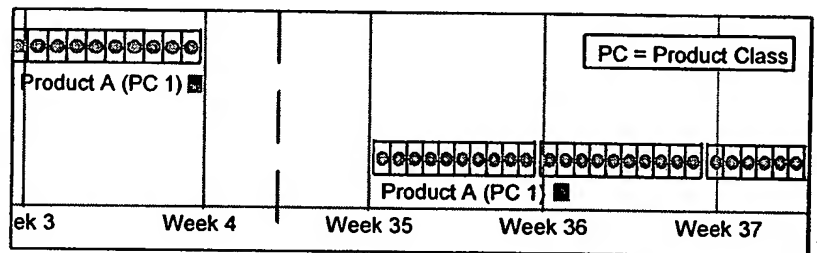
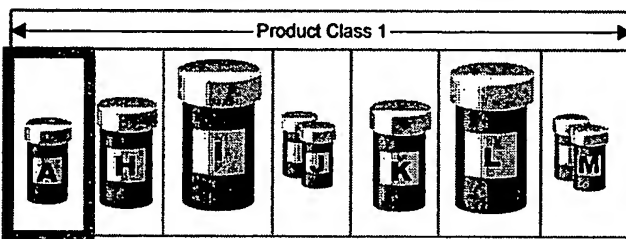
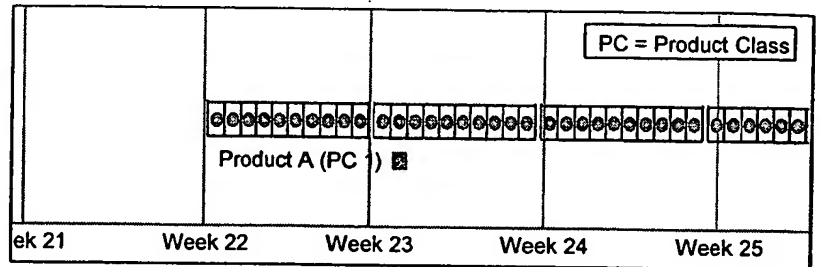
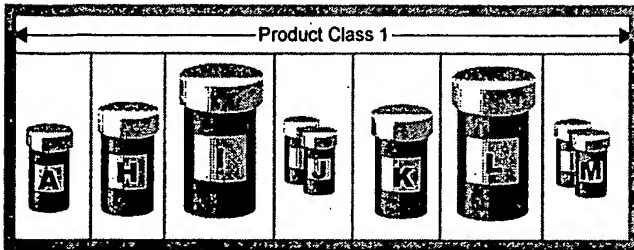
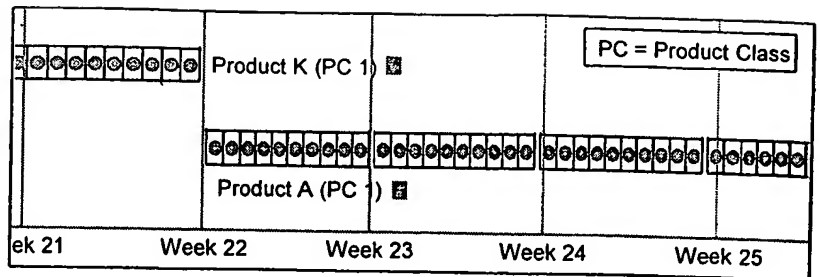
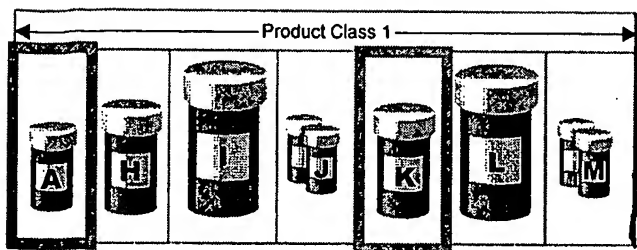
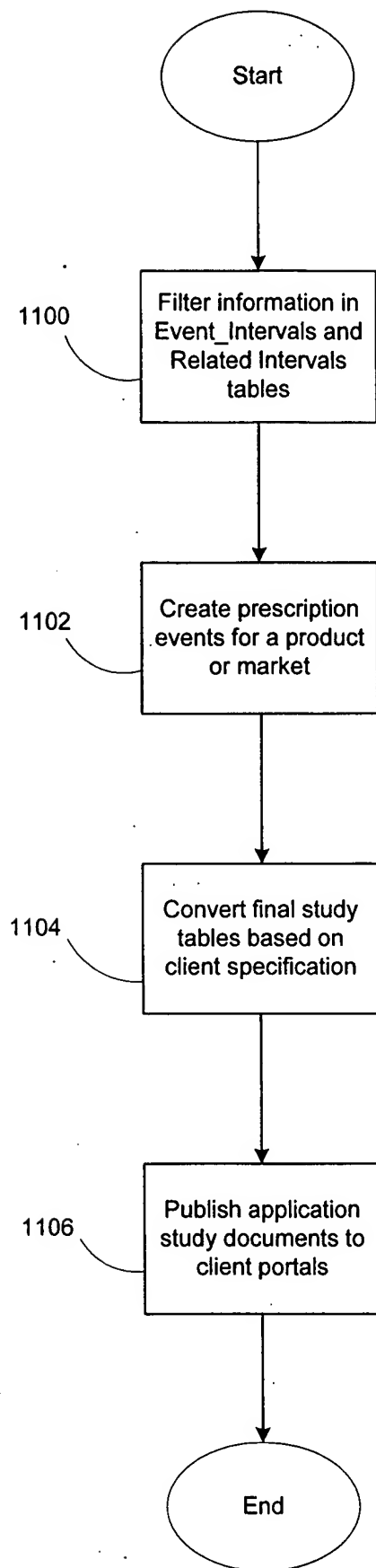


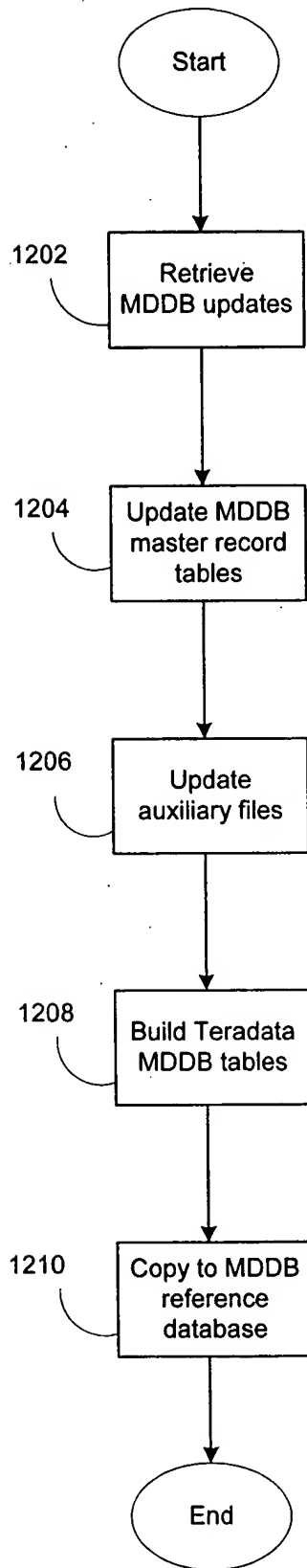
Figure 10e

512



**FIG. 11**

1200



**FIG. 12**

## Teradata MSA Geography tables

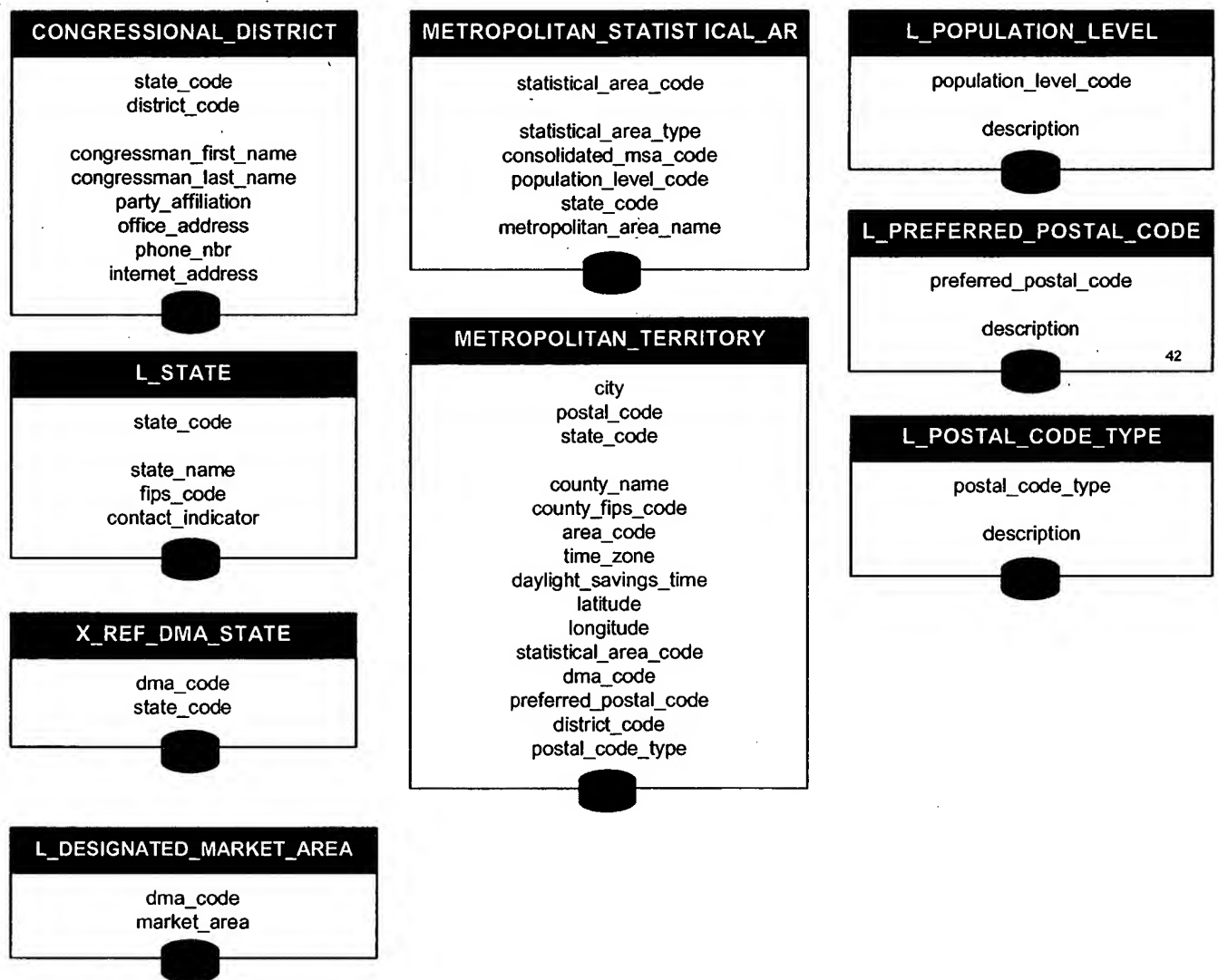


Figure 13

Request Monitor

Client Market Configuration

Client Market Log

Group Configuration

Group Options

Template Editor

ScripMaxIQ

Intelligence for Targeted Action

DENDRITE

Sign Out

refresh

Client Market Log

04-13-2003 03:06:28 PM

Client Market:

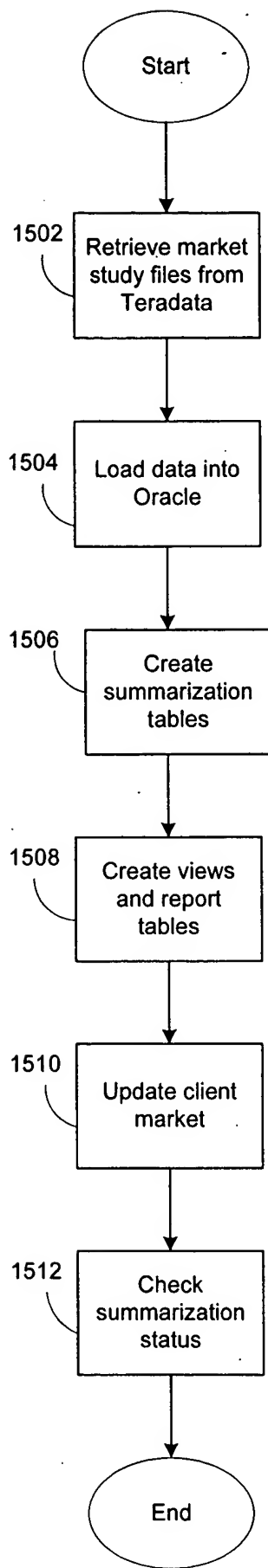
View All Markets

Refresh

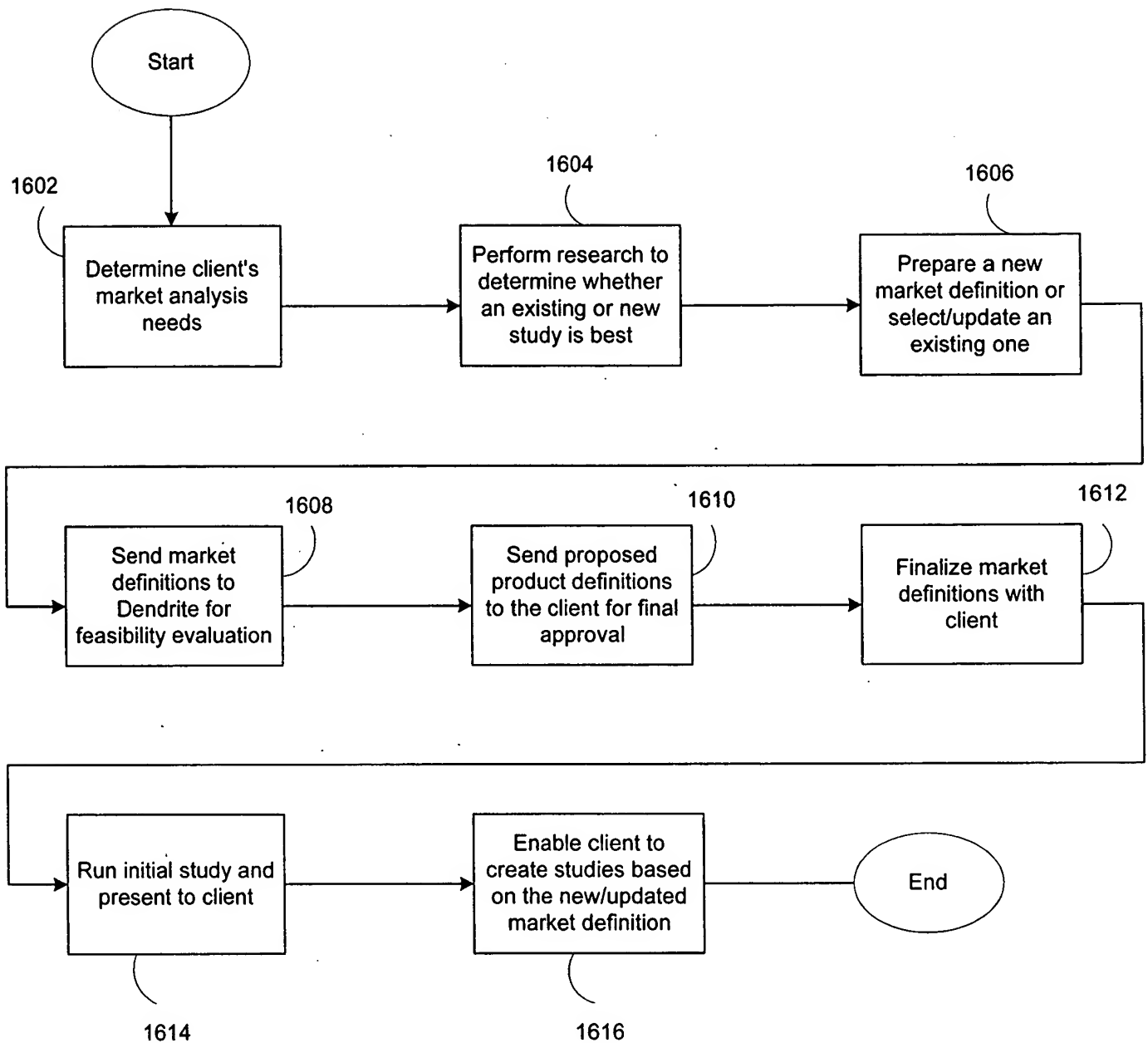
|               | ID  | Name   | Type | Date                      | Description   |
|---------------|-----|--|------|---------------------------|---|
| Update Cancel | 260 | Antipsychotics                                 | TA   | 04-22-2003<br>10:25:55 AM | Summarization - Therapy   |
| Edit          | 256 | Multiple Sclerosis                             | SC   | 04-17-2003<br>10:58:38 AM | Summarization - Single Class  |
| Edit          | 236 | Schering Plough<br>Antihistamines              | SC   | 04-17-2003<br>01:49:31 AM | Summarization - Single Class  |
| Edit          | 102 | ARB Combinations<br>(Single Class)             | SC   | 04-09-2003<br>08:30:00 PM | Manually  |
| Edit          | 101 | ARB (Single Class)                             | SC   | 04-09-2003<br>06:00:00 PM | Manually  |
| Edit          | 100 | Antihypertensive                               | TA   | 04-09-2003<br>05:31:00 PM | Manually  |
| Edit          | 139 | HMO CoA Reductase<br>Inhibitors (Single Class) | SC   | 04-03-2003<br>04:00:00 PM | Manually  |
| Edit          | 86  | Glaucoma (Therapy Area)                        | TA   | 04-03-2003<br>02:00:00 PM | Manually  |
| Edit          | 39  | Hyperlipidemia (Therapy<br>Area)               | TA   | 04-03-2003<br>12:30:00 PM | Manually  |
| Edit          | 52  | Proton Pump Inhibitors                         | SC   | 03-12-2003<br>10:34:22 AM | All products from Class ID 492700. Market Definition from MDDB.   |
| Edit          | 51  | Osteoporosis                                   | SC   | 03-10-2003<br>10:43:00 AM | All Products from Classes: Classids 300420, 300430, 300440, 300450, 300530. All merged together on ClassID 3004. All market definitions from MDDB.        |
| Edit          | 49  | HMO CoA Reductase                              | SC   | 03-06-2003                | Classids 394000 and 394099 from teradata merged into class id 3940 (HMOCoA Reductase Inhibitors and HMO CoA Reductase Inhibitors Combination). All market |

Figure 14

1500

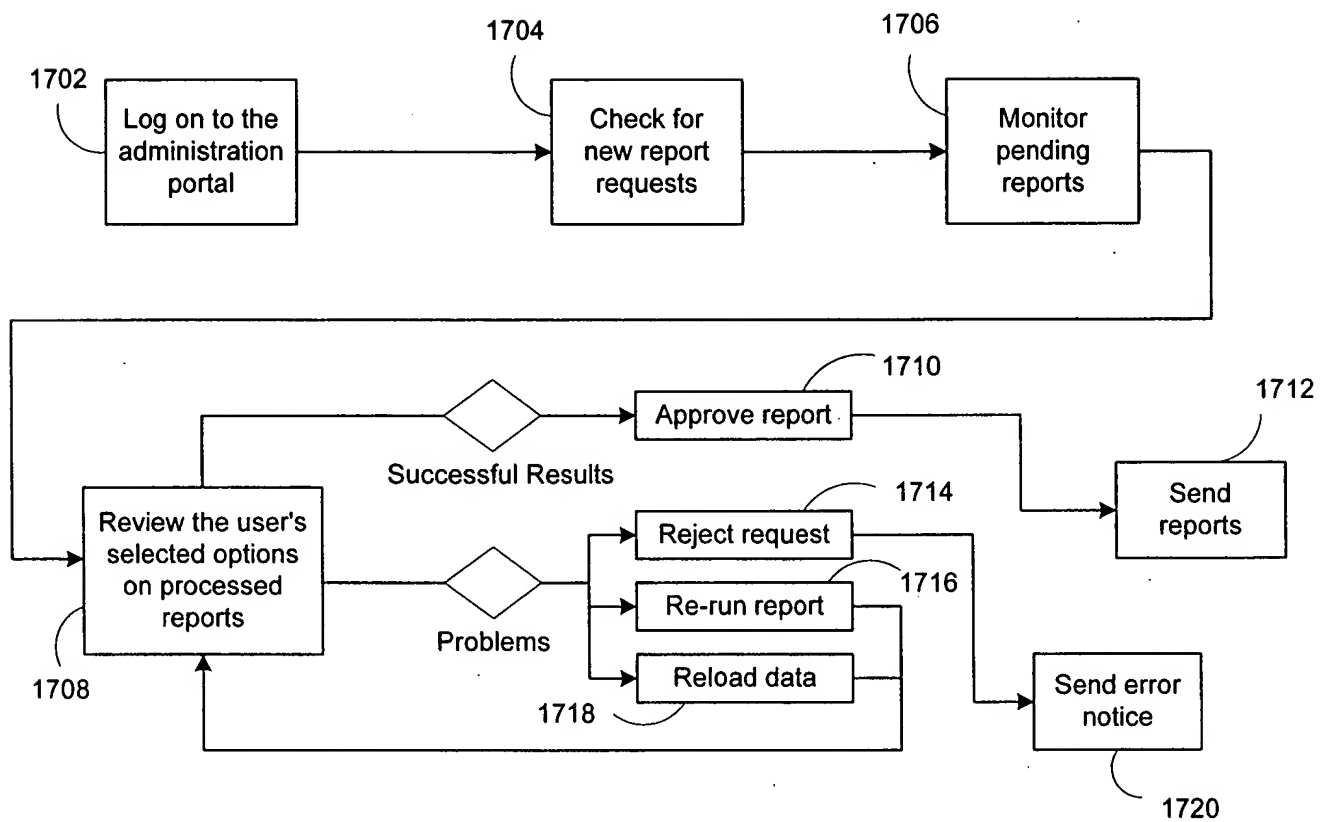


**FIG. 15**

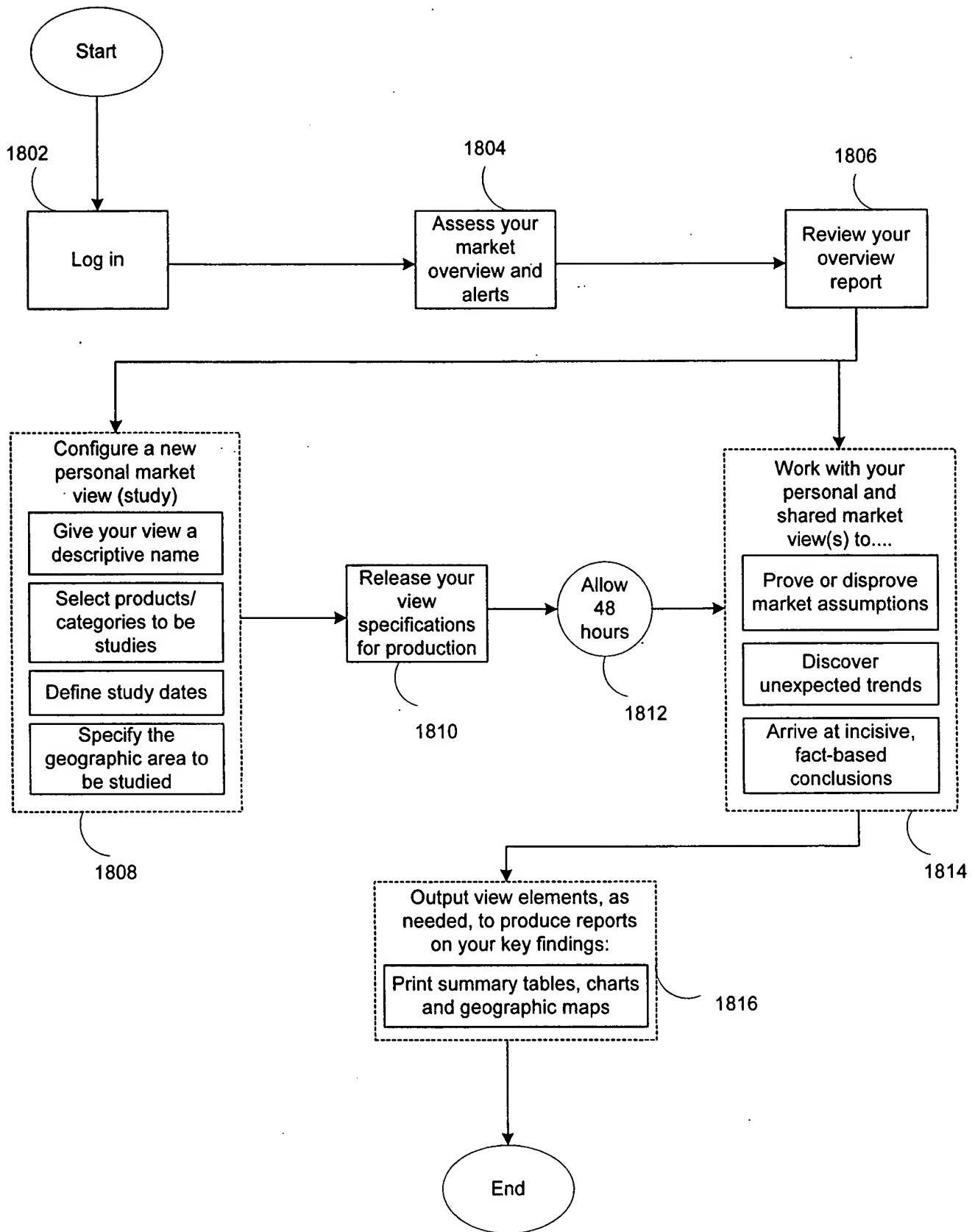


**FIG. 16**

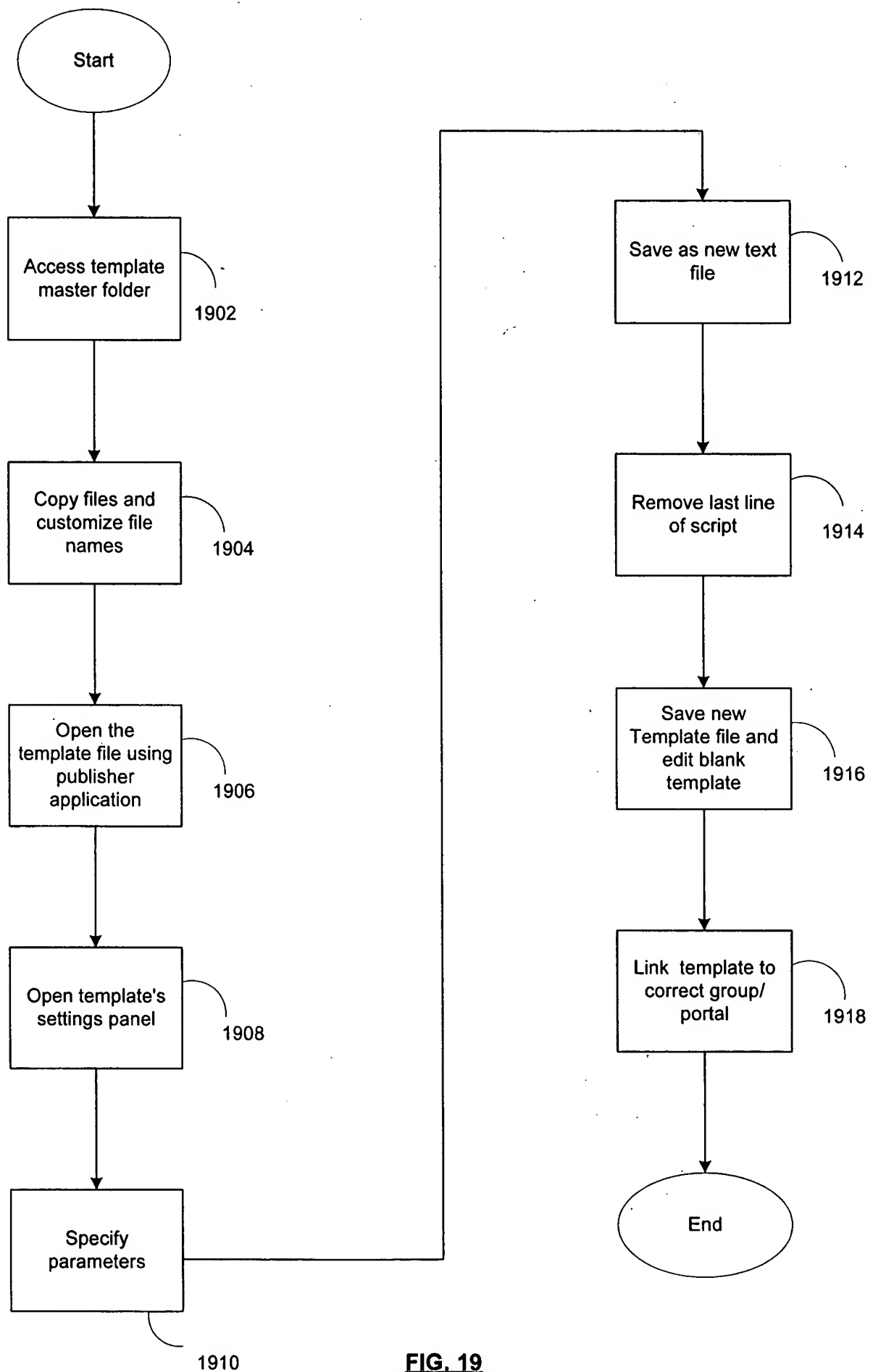




**FIG. 17**



**Fig. 18**



**FIG. 19**



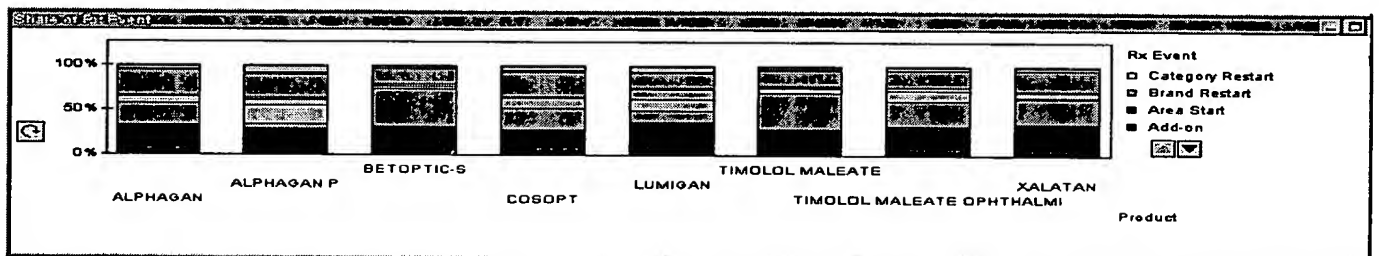
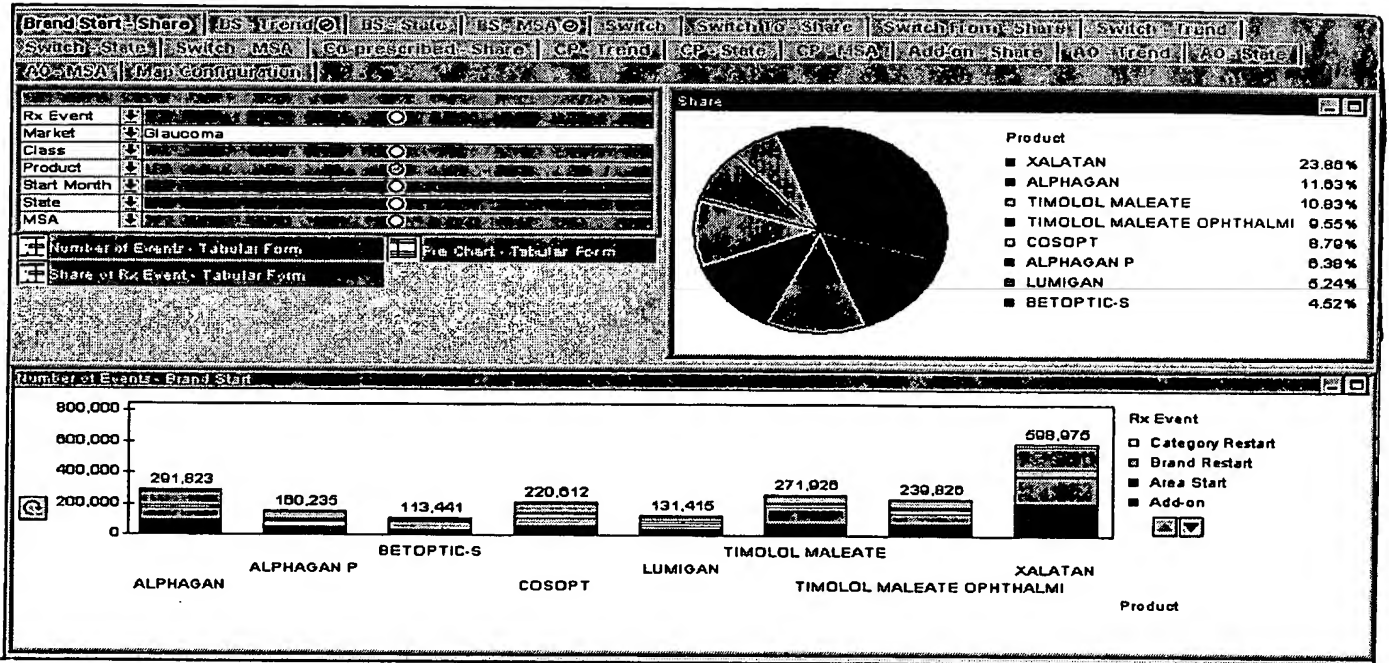


Figure 20 b

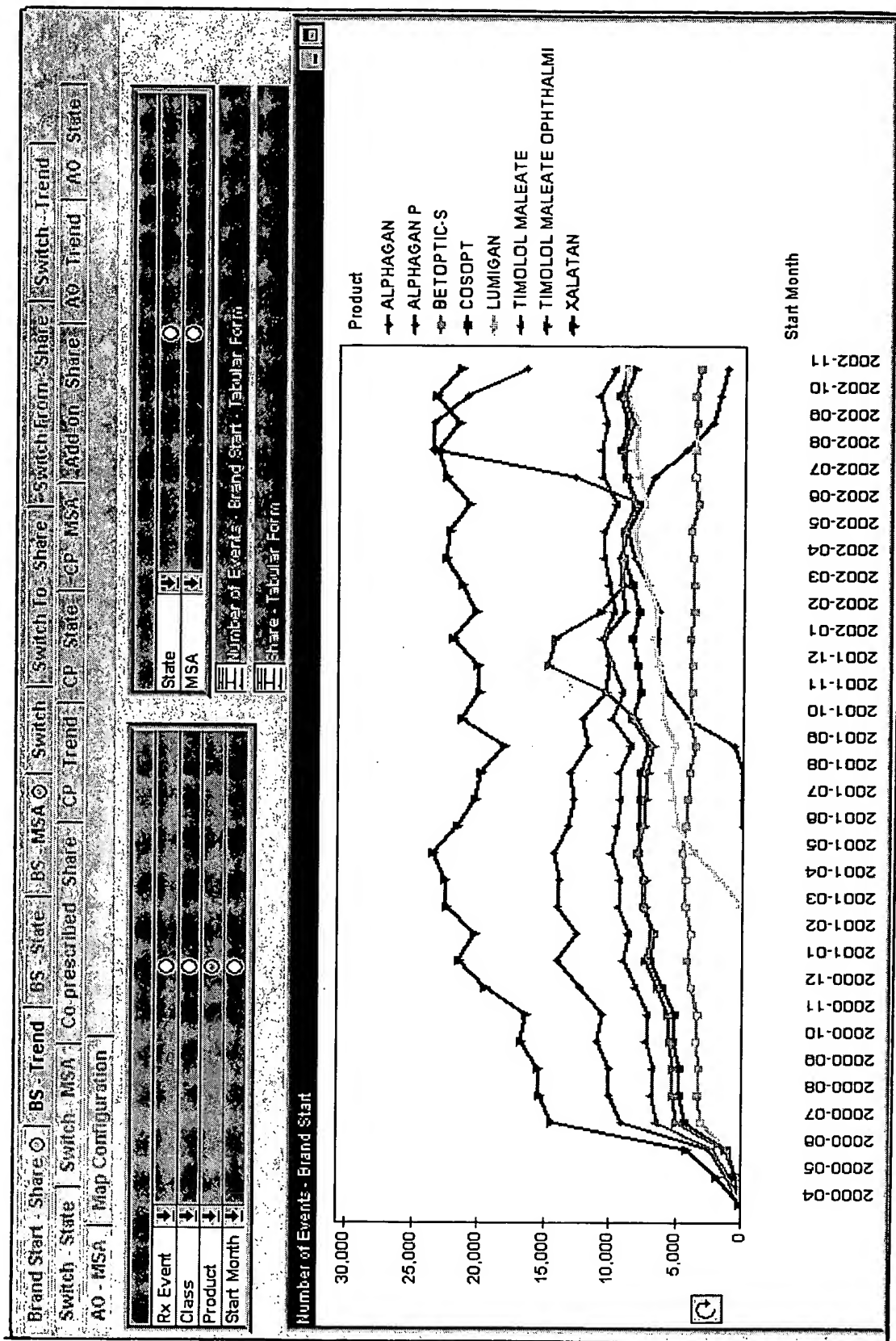


Figure 20C

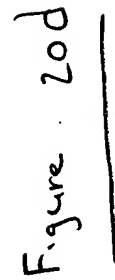


Figure 20d



Brand Start - Share
BS - Trend
BS - State
BS - MSA
Switch
Switch To - Share
Switch From - Share
Switch - Trend

Switch - State
Switch - MSA
Co-prescribed - Share
CP - Trend
CP - State
CP - MSA
Add-on - Share
AO - Trend
AO - State

AO - MSA
Map Configuration

Number of MSA Events - Grand Stat

MSA
Absolute
Per Total Population

|                                  |           |          |
|----------------------------------|-----------|----------|
| Total                            | 2,028,253 |          |
| Events with No Matching MSAs     | 1,306,151 |          |
| New York, NY PMSA                | 40,683    | 4,367.83 |
| Los Angeles-Long Beach, CA PMSA  | 29,681    | 3,117.97 |
| Chicago, IL PMSA                 | 25,828    | 3,122.06 |
| Philadelphia, PA-NJ PMSA         | 23,012    | 4,511.33 |
| Washington, DC-MD-VA-WV PMSA     | 16,164    | 3,281.23 |
| Orange County, CA PMSA           | 14,517    | 5,100.33 |
| Boston, MA-NH PMSA               | 13,183    | 3,869.58 |
| Detroit, MI PMSA                 | 13,126    | 2,965.27 |
| Baltimore, MD PMSA               | 11,758    | 4,605.57 |
| Cleveland-Lorain-Elyria, OH PMSA | 11,510    | 5,113.58 |
| Nassau-Suffolk, NY PMSA          | 11,198    | 4,066.21 |
| Houston, TX PMSA                 | 10,767    | 2,577.29 |
| Atlanta, GA MSA                  | 9,857     | 2,397.01 |

Rx Event
Class
Product
Start Month
State
CMSA
MSA

Map It

Other Values on MSA Events - Grand Stat

Figure 20c



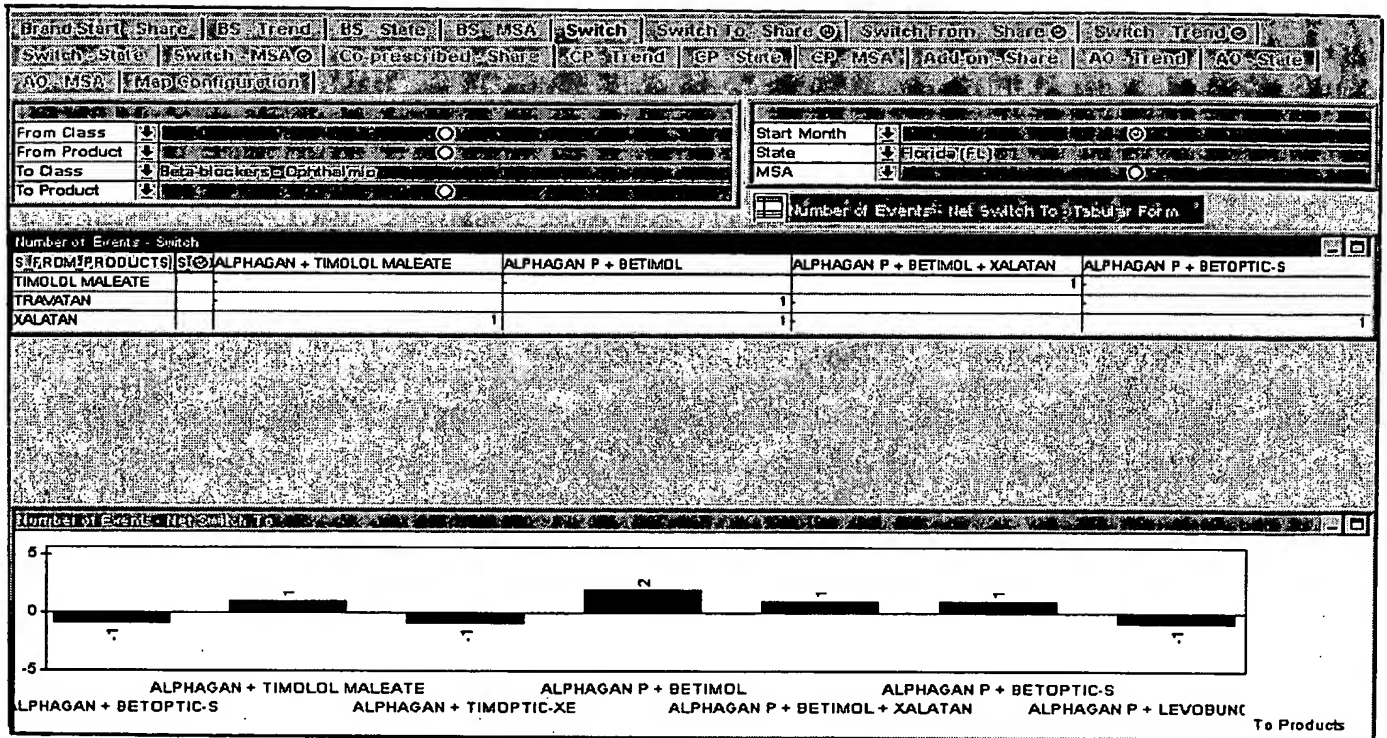


Figure 20f

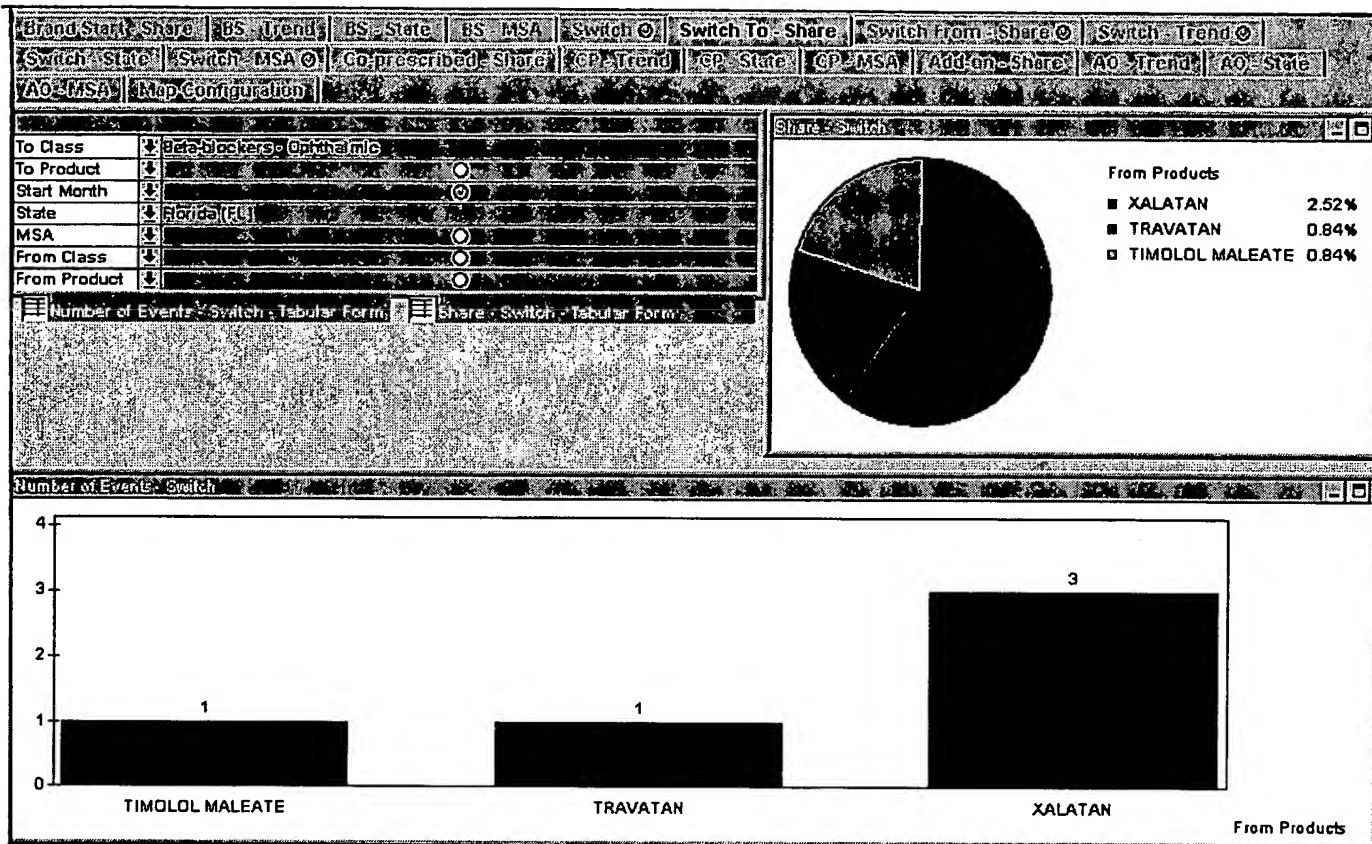


Figure 20g

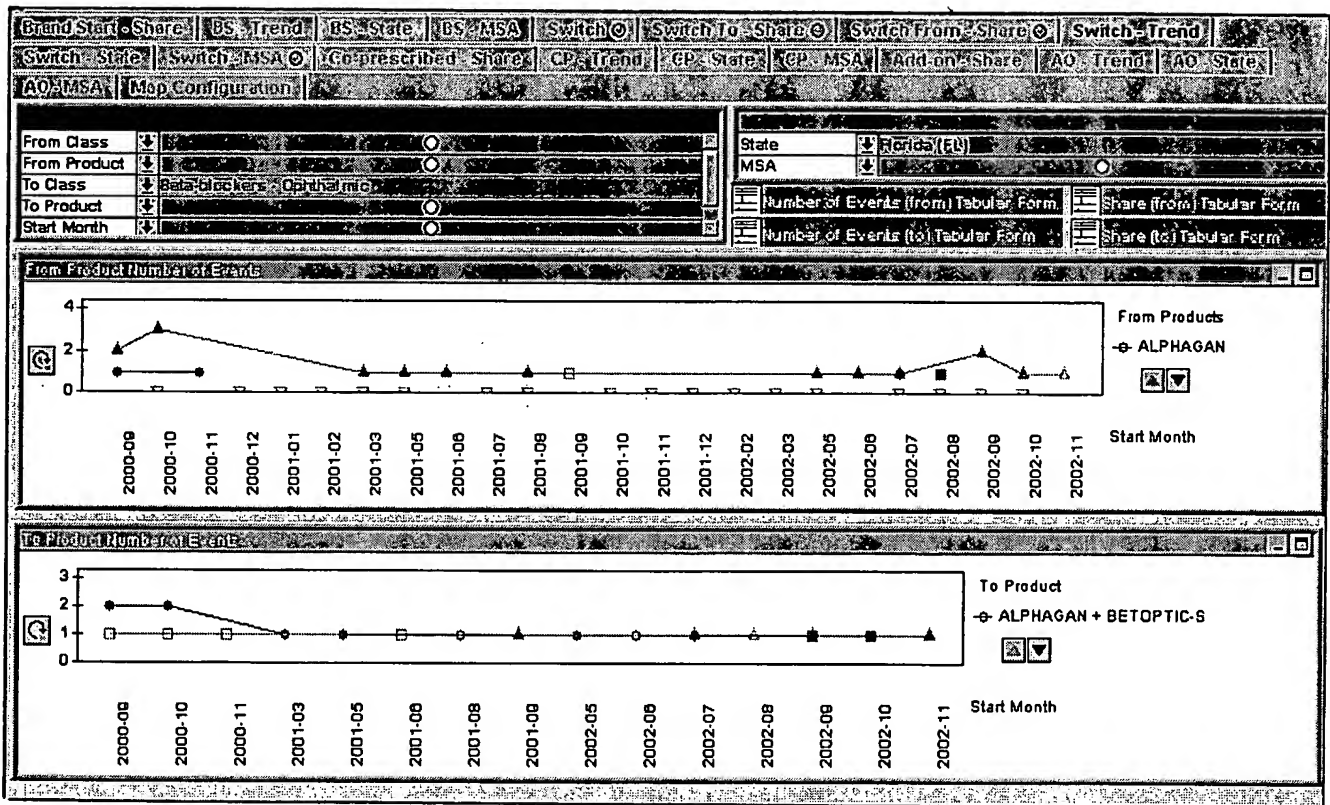
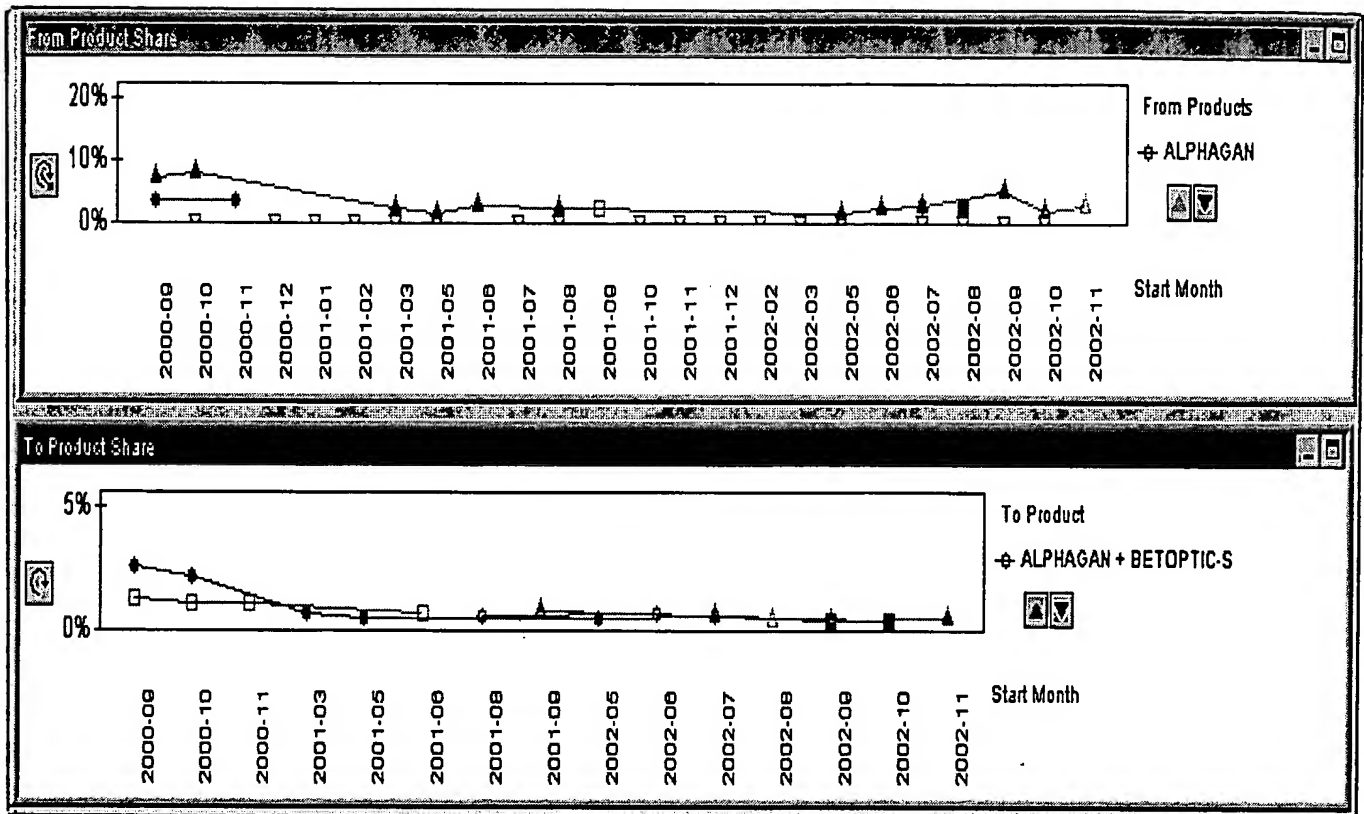


Figure 20h



**Figure 20i**

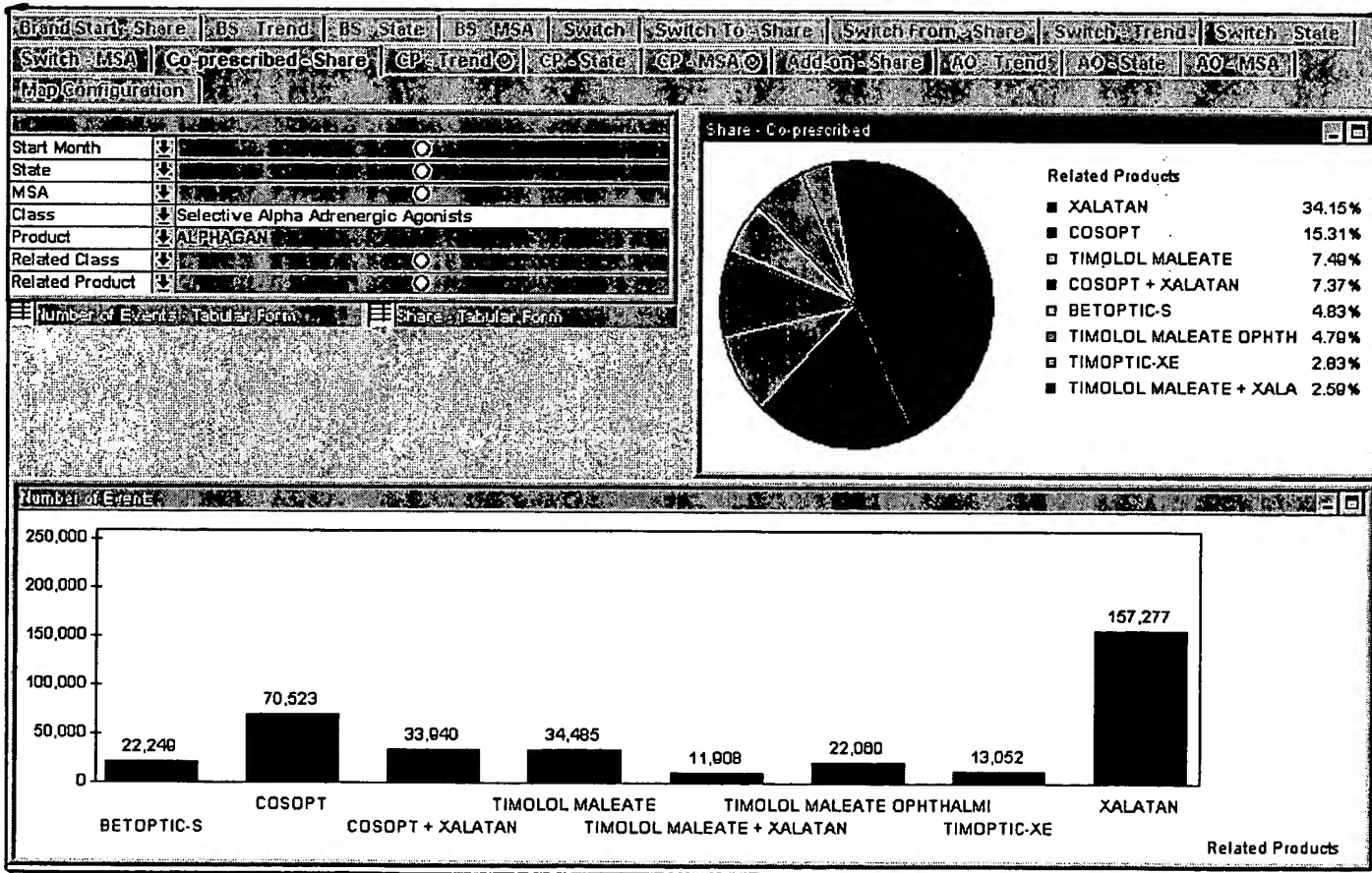


Figure 20j

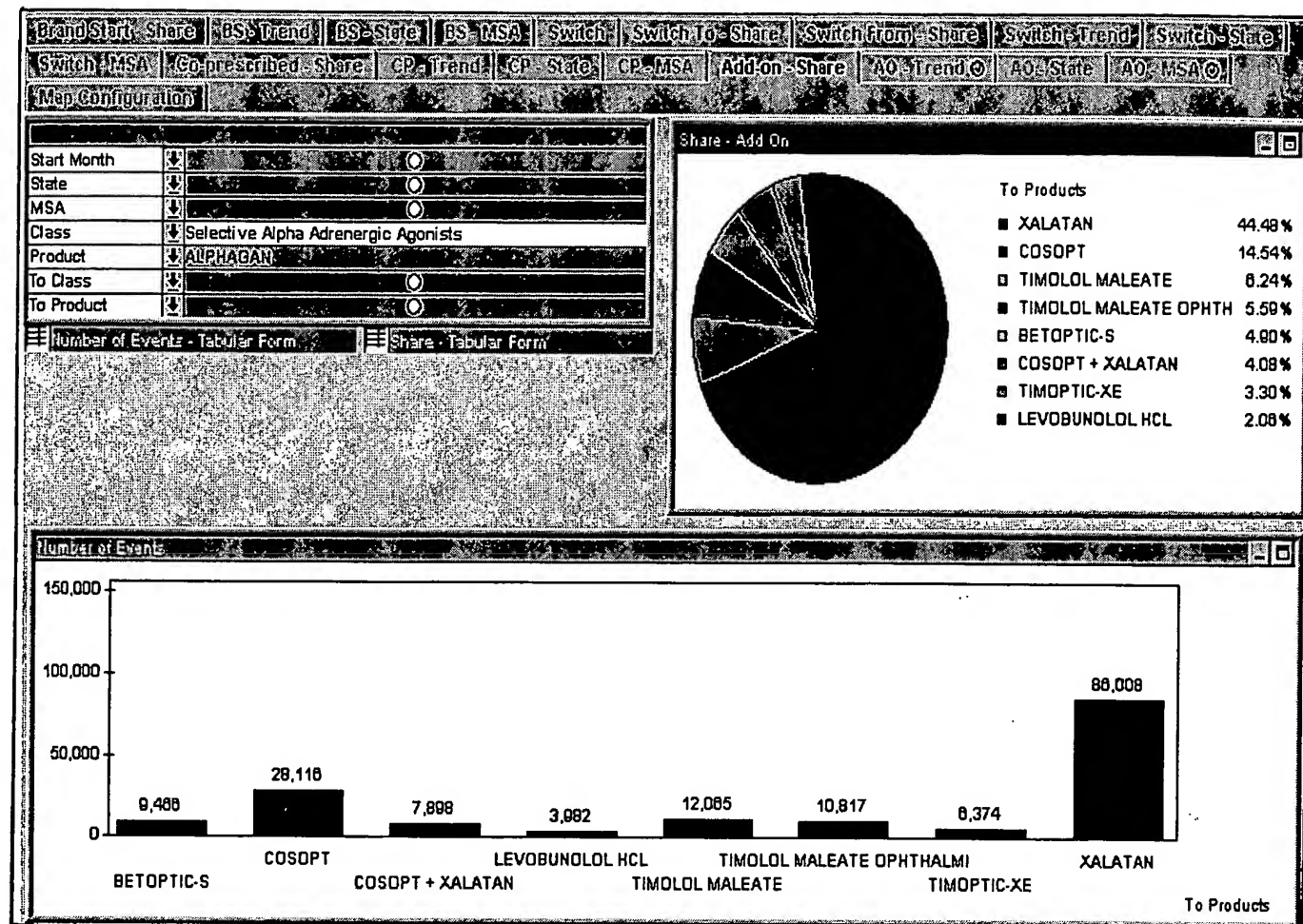


Figure 20 k

|                     |                       |            |            |          |                   |                     |                |                |
|---------------------|-----------------------|------------|------------|----------|-------------------|---------------------|----------------|----------------|
| Brand Start - Share | BS - Trend            | BS - State | BS - MSA   | Switch   | Switch To - Share | Switch From - Share | Switch - Trend | Switch - State |
| Switch - MSA        | Co-prescribed - Share | CP - Trend | CP - State | CP - MSA | Add-on - Share    | AO - Trend          | AO - State     | AO - MSA       |

**Map Configuration**

**Layer Configuration**

**Visibility Behavior**

| Layer  | Label  |
|--|--|
| Water <input type="button" value="Automatic"/> <input type="button" value="Change"/>       | <input type="button" value="Automatic"/> <input type="button" value="Change"/> |
| County <input type="button" value="Automatic"/> <input type="button" value="Change"/>      | <input type="button" value="Automatic"/> <input type="button" value="Change"/> |
| City <input type="button" value="Automatic"/> <input type="button" value="Change"/>        | <input type="button" value="Automatic"/> <input type="button" value="Change"/> |
| US Route <input type="button" value="Automatic"/> <input type="button" value="Change"/>    | <input type="button" value="Automatic"/> <input type="button" value="Change"/> |
| Major Route <input type="button" value="Automatic"/> <input type="button" value="Change"/> | <input type="button" value="Automatic"/> <input type="button" value="Change"/> |
| Highway <input type="button" value="Automatic"/> <input type="button" value="Change"/>     | <input type="button" value="Automatic"/> <input type="button" value="Change"/> |
| Road <input type="button" value="Automatic"/> <input type="button" value="Change"/>        | <input type="button" value="Automatic"/> <input type="button" value="Change"/> |
| State Boundary <input type="button" value="Automatic"/>                                    | <input type="button" value="Automatic"/> <input type="button" value="Change"/> |
| MSA Boundary <input type="button" value="Automatic"/>                                      | <input type="button" value="Automatic"/> <input type="button" value="Change"/> |
| Zip Boundary <input type="button" value="Automatic"/>                                      | <input type="button" value="Automatic"/> <input type="button" value="Change"/> |

**Color Scheme: Red**

**Map Size (height X width) : 540 X 780**

700 X 1000

540 X 780

300 X 500

200 X 200

**Plotting Calculations**

Multiplier used in the per capita rates: 1000000

| Value Type                               |
|--|
| Number of Events per Total Population    |
| Absolute Number of Events                |
| Number of Events per Male Population     |
| Number of Events per Female Population   |
| Number of Events per Under 14 Population |
| Number of Events per Over 65 Population  |

☐ State Population Values
 ☐ MSA Population Values

**Figure 201**



ScriptMax 10 - Refresh Study - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites Media

Address http://scriptmax.dendrite.com/DendriteUser/az/edit.cfm?action=edit&viewid=2222&ReturnURL=/DendriteUser/az/index... Go Links

Refresh Study - Antidepressant

Name: Antidepressant August 2003 Rename

Template: MSA Brand Start  
MSA Level Brand Start - Share, Product Trend, Rx Event Trend, State, MSA

Products: Alpha-2 Receptor Antagonists (Tetracyclines) All None  
☐ Miltazapine ☐ Remeron ☐ Remeron SoliLab  
 MAO Inhibitors All None  
☐ Marplan ☐ Nardil ☐ Parnate  
 Misc. Antidepressants All None  
☐ Bupropion Hcl ☒ Effexor ☒ Effexor Jr  
☐ Ludiomil ☒ Maprotiline Hcl ☒ Wellbutrin  
☒ Wellbutrin Sr  
 Modified Cycles All None  
☐ Desyrel ☐ Desyrel Diadose ☐ Serzone  
☐ Trazadone Hcl ☐ Trazadone Hcl Dik...  
☐ Trialodine  
 Selective Serotonin Reuptake Inhibitors (SSRIs) All None

Market Details

Antidepressant  
 Type: Therapy Area  
 Refreshed: Wednesday, Aug 20  
 Estimated Size  
 4.8 MB  
 Within 50 MB Size Limit

Figure 21



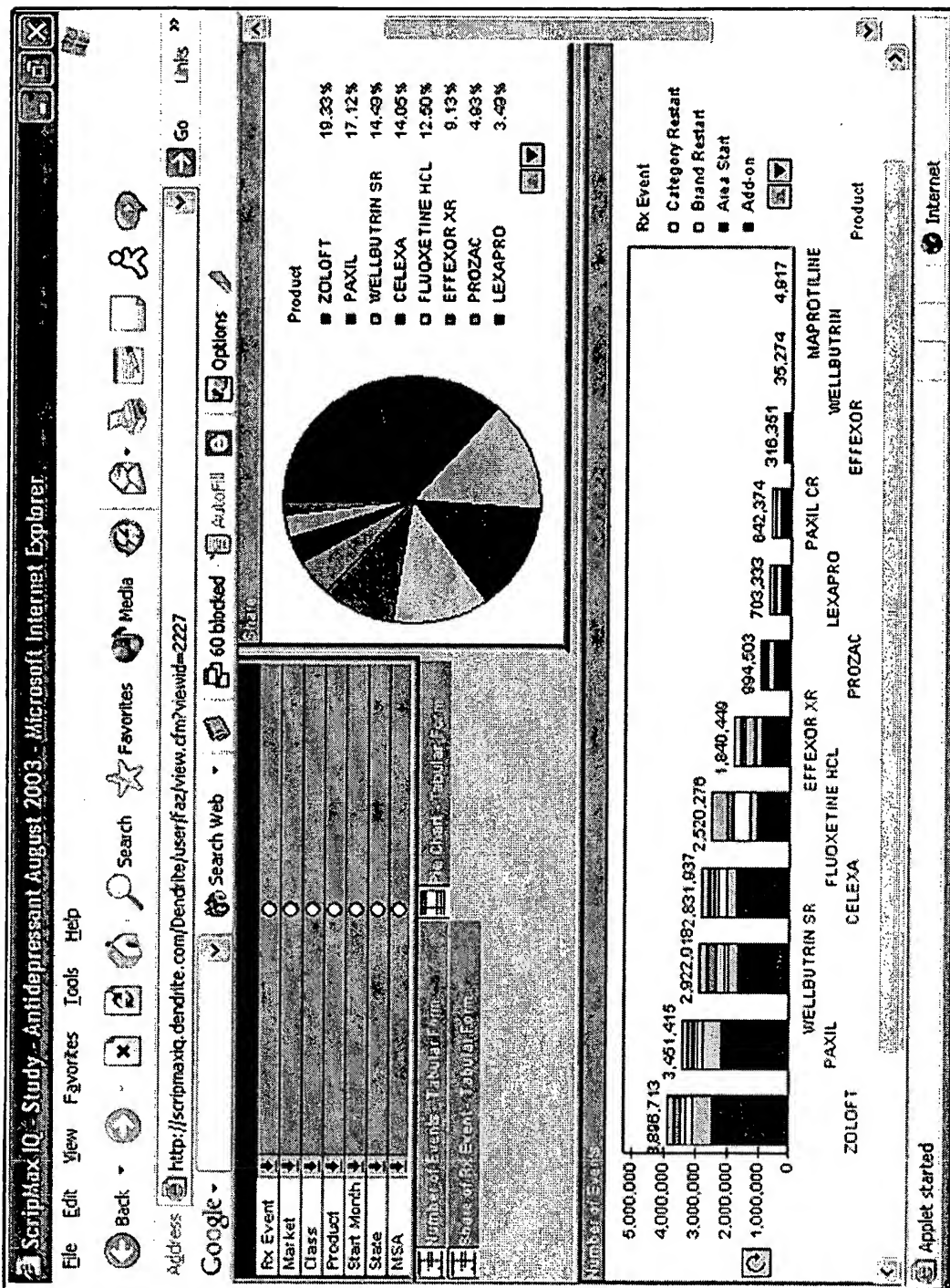


Figure 22

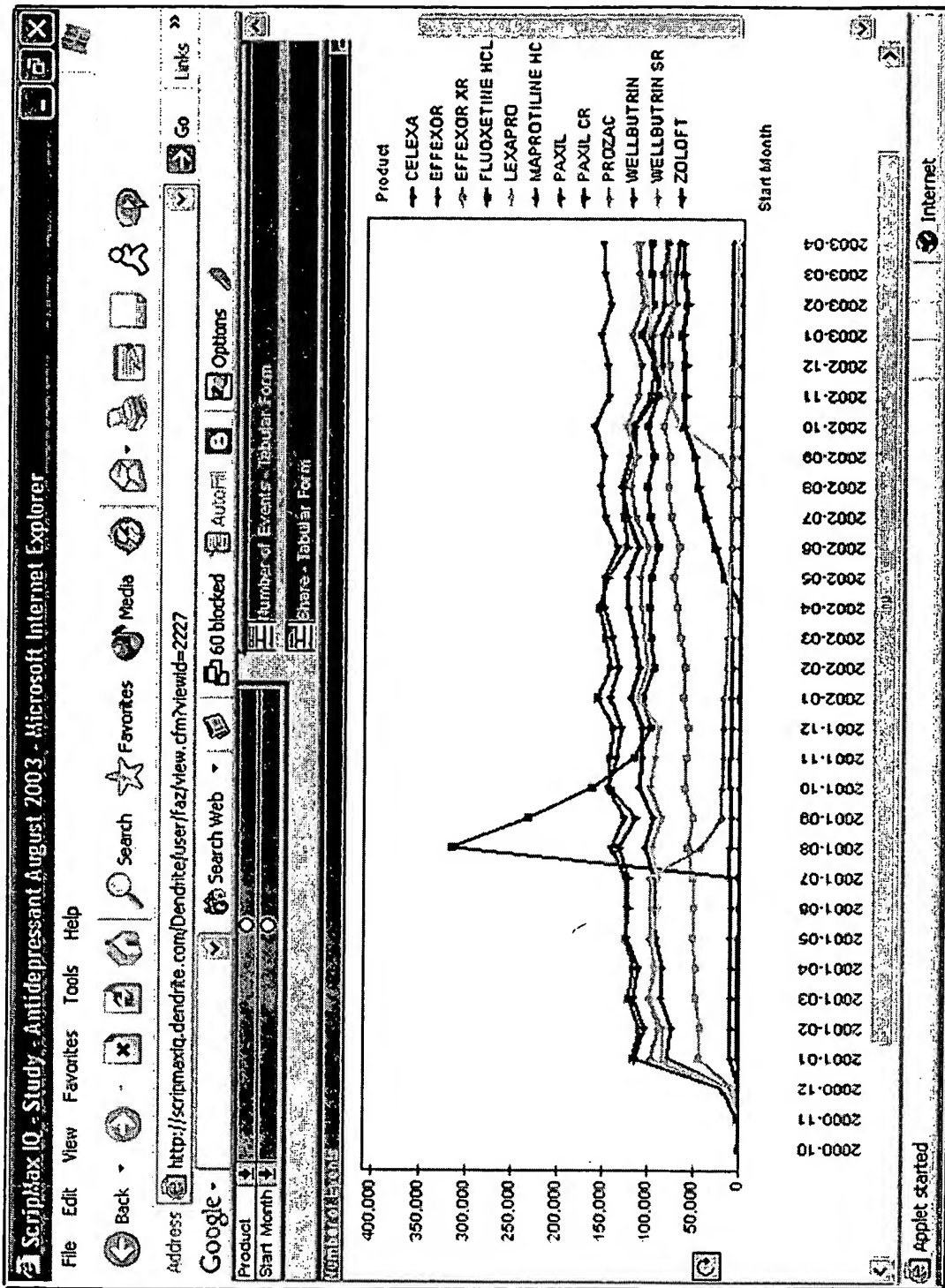


Figure 23

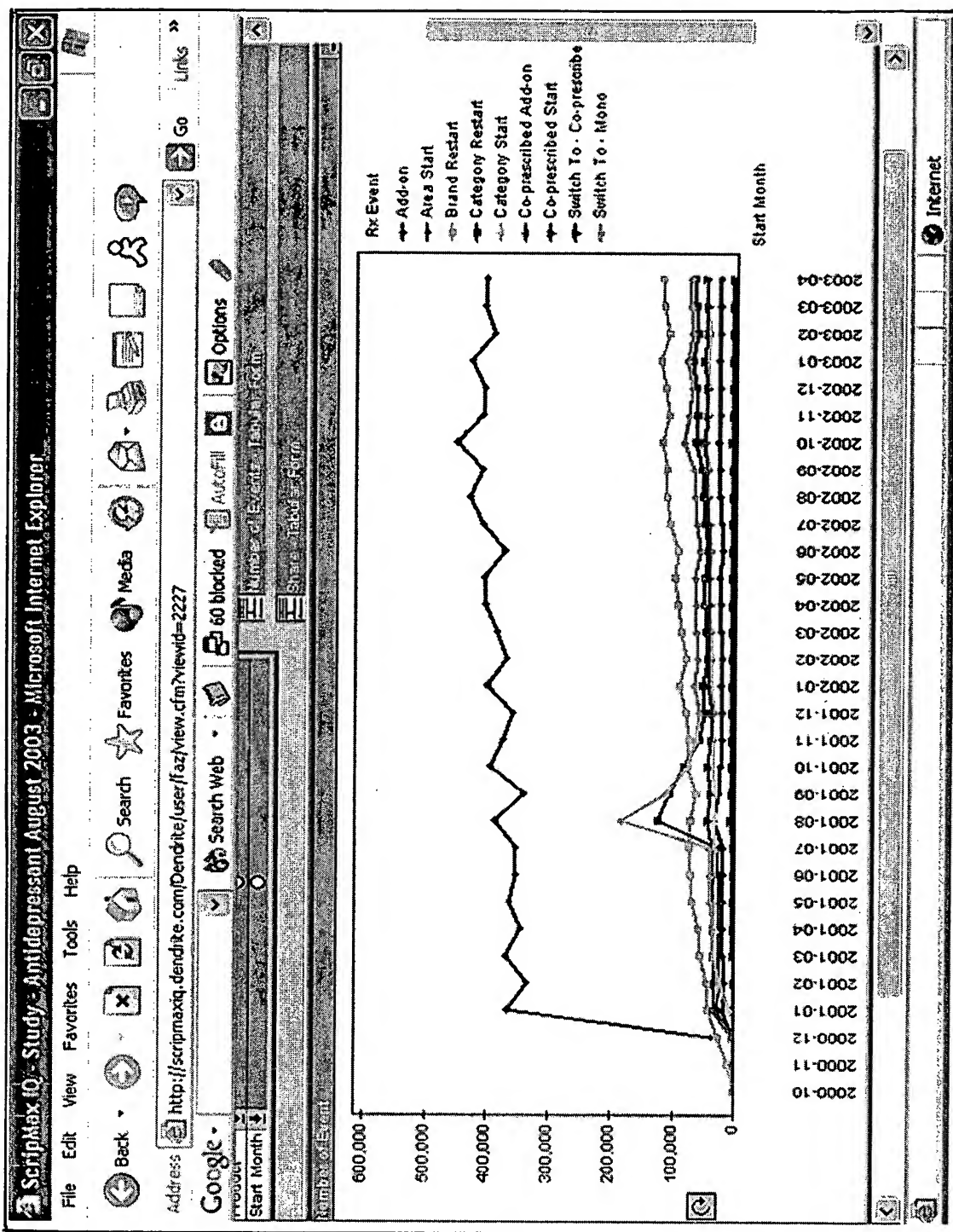
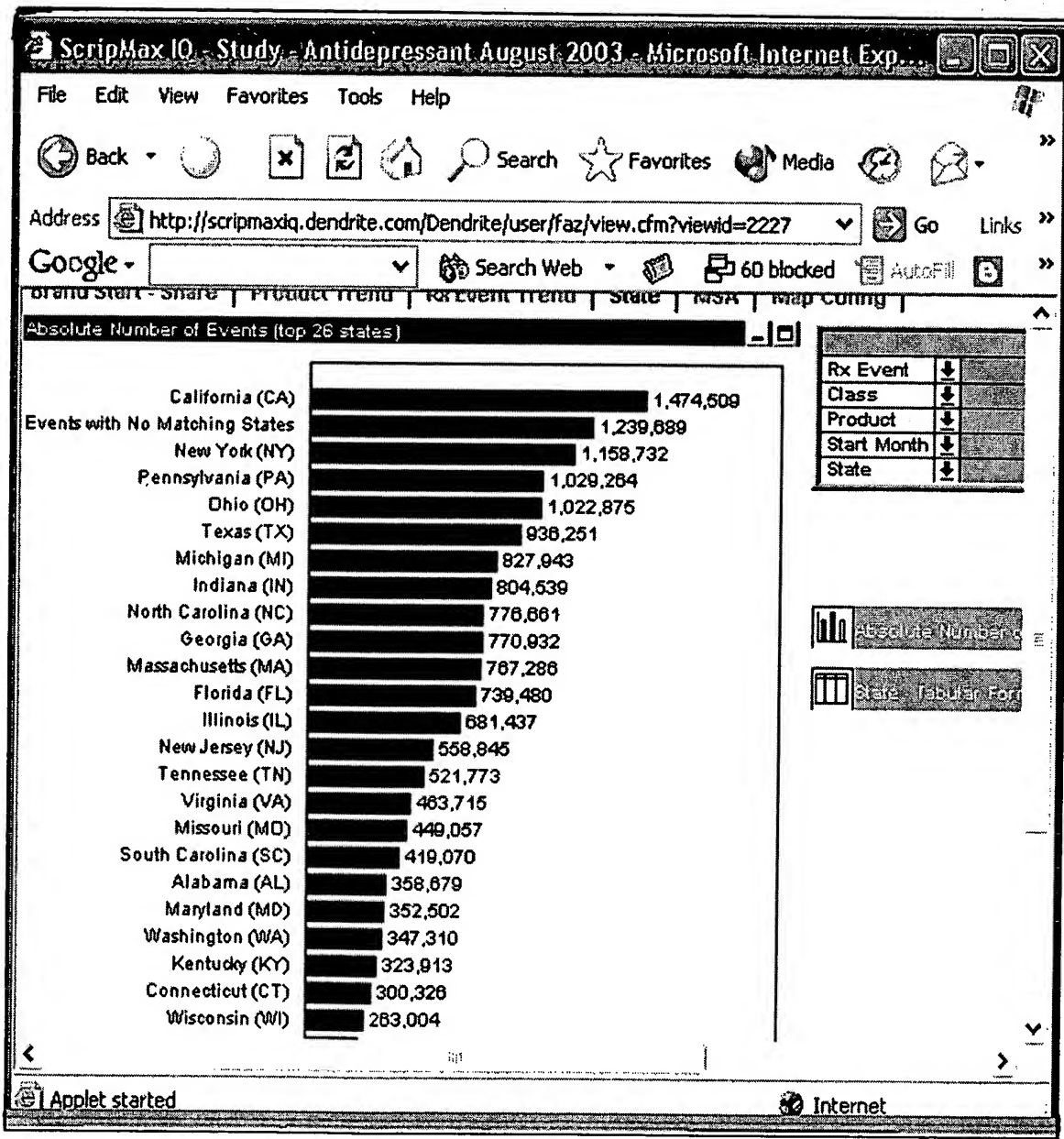


Figure 24

Figure 25



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